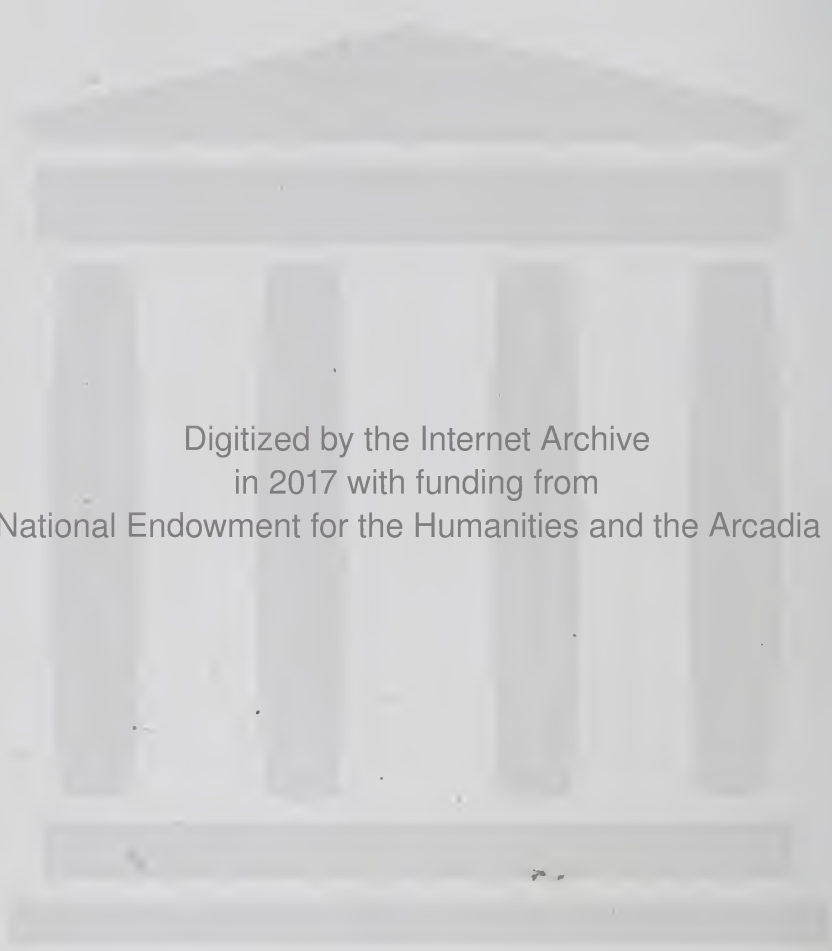




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NEXT MEETING AT ROSWELL, SEPT. 15-16, 1909

THE JOURNAL

OF THE
NEW MEXICO MEDICAL SOCIETY

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EDITORIAL

Through the efforts of Dr. C. M. Yater, Secretary of the Chaves County Medical Society, the following rates on all lines of transportation entering Roswell have been secured:

Over the Santa Fe Ry., one and one-fifth fare for round trip.

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ticket to Roswell only, being careful to get receipt for money paid for same. This receipt is countersigned by your secretary at Roswell, and upon presentation at ticket office you will be given a return trip ticket for one-fifth fare.

Permission to use the private automobile road between Torrance and Roswell has also been secured for those who wish to go overland in touring cars, but the management requests that, should the road be wet, the mail car leaving Torrance at 5:30 a. m. be allowed to pilot the private cars to Roswell.

Those who desire to make the trip in this way will please keep the above request in mind.

No charge for the use of the road will be attached.

The next annual meeting of the New Mexico Medical Society will be held at Roswell, Wednesday and Thursday, September 15th and 16th.

The Committee on Arrangements and the entire membership of the Chaves County Medical Society have exerted every effort to make the coming meeting successful and enjoyable from every standpoint.

This will be the first meeting ever held at Roswell, and from all indications the attendance will be very large. The scientific program covers a great variety of subjects, all of which will no doubt be enthusiastically discussed. A preliminary sketch of this program follows.

The secretary would again call your attention to the fact that the New Mexico Medical Society is the only door to membership in the American Medical Association for physicians in the Territory. Every regular physician in the Territory should join us. Application blanks will be gladly furnished to all who ask for them.

THE ROSWELL MEETING.

Will you help to make it a good one?

We have a good program.

We meet in a good place.

Make it a good meeting by helping to secure a good attendance, by being at every session on time, by taking part briefly in discussions, by seeking in every action taken by the Society the highest welfare of the citizens of our Territory, and thereby maintain the honorable record of the New Mexico Medical Society; lastly, but not least important, by bringing the ladies with you.

The Grand Central Hotel, Roswell, which will be headquarters, and at which our banquet will be held, makes a special rate of \$2.00 per day to the visiting physicians and their wives.

PRELIMINARY PROGRAM FOR THE ROSWELL MEETING. N. M. MEDICAL SOCIETY SEPT. 15-16, 1909.

"Pseudoleukemia," Dr. B. F. Stevens, El Paso, Texas.

"Infantile Scorbustus," Dr. C. E. Lukens, Albuquerque.

"Pelvic Inflammation," Dr. A. H. Faith Clovis.

"Otitis Media," Dr. T. E. Pressley, Roswell.

"Milk Sickness," Dr. C. F. Montgomery, Roswell.

"The Indigent Consumptive," Dr. C. M. Mayes, Roswell.

"Ectopic Gestation," Dr. H. A. Ingalls, Roswell.

"Use and Abuse of Surgery," Dr. W. C. Buchley, Roswell.

"Saline Transfusion in the Treatment of Ilio-Colitis," Dr. C. F. Beeson, Roswell.

"Treatment of Typhoid Fever in Private Practice," Dr. L. H. Pate, Lake Arthur.

"Medical Aspects of Life Insurance," Dr. F. de la Vergne, Albuquerque.

"Treatment of Cystitis," Dr. James Vance, El Paso, Texas.

"Notes on 128 Consecutive Cases of Appendicitis Treated with Continuous Irrigation, etc.," Dr. Geo. C. Bryan, Alamogordo.

"Vesical Calculus" (with exhibit of specimens), Dr. J. W. Colbert, Albuquerque.

"The Careful Practice of Obstetrics," Dr. C. D. Ottosen, Willard.

"The Practicing Physician and His Care of the Consumptive," Dr. J. W. Laws, Lincoln.

"Hay Fever," Dr. J. W. Tinder, Roswell.

"Physical Diagnosis of Tuberculosis," Dr. J. W. Kinsinger, Roswell.

"Septic Infection of the Uterus and Adnexa," Dr. D. H. Carns, Albuquerque.

"Fallacies of Methods of Staining the so-called Bacillus Tuberculosis," Dr. F. T. B. Fest, East Las Vegas.

"Eye Strain; Its Diagnosis and Treatment," Dr. Frank E. Tull, Albuquerque.

"Preliminary Report on the Hypodermic use of Mercury in Tuberculosis," Dr. LeRoy S. Peters, Silver City.

"Peritonitis," Dr. S. D. Swope, Deming.

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Physicians desiring further information relative to the dropper-ampoule are advised to write to Parke, Davis & Co. for their illustrated circular descriptive of the new package, addressing them either at their main laboratories, Detroit, Mich., or any of their branches.

FRACTURES OF THE SKULL.*

By Dr. L. G. Rice, Albuquerque.

The skull may be said to be fractured in distinction to its being wounded, when as the result of a blow it becomes cracked or broken into more or less separate pieces.

This injury is classified admirably by Keen, from whom most of this paper is taken.

Depending on the mechanical factors at work in their production, they are distinguished as bursting fractures and fractures due to local depression or indentation.

Fractures are open or compound when the overlying soft parts are destroyed. They are simple or closed fractures when the soft tissues covering them remain intact. According to their form they are distinguished as linear or fissured, that is where the bone is simply cracked without displacement. Where the sutures are only separated they are called fractured by diastasis. Comminuted or fragmental fractures are when the line of the fracture intersects so as to isolate separate pieces of bone. Depressed fractures when fragments of bone, whether of the entire cranial thickness or of the inner table alone are driven below their spherical level.

Perforating fractures or fractures with loss of substance are the result of punctured wounds as is the case in most penetrating bullet wounds.

According to their location they are classified as fractures of the base and fractures of the vault. Though they are separately classified, fractures of the base are generally a continuation of a fracture of the vault if not a continuation of a fracture elsewhere it is due to a force transmitted from another

part. Fractures of the base are almost always linear and practically never displaced.

The Mechanism of Fractures.—Regarded as a hollow shell of bone which possesses elasticity sufficient to rebound when dropped, the cranium must needs differ from all other bones of the skeleton in the mechanism of its injuries. Certain of the physical laws which explain the peculiar form assumed by these injuries are known to us; others are still in dispute, and though, from a strictly clinical point of view, of chief importance is the knowledge that under certain conditions breaks occur in a certain manner and lead to certain complications, we naturally search for an explanation of the reason why they so occur, even though this information may in no wise effect our diagnosis, prognosis, or treatment.

We must take into consideration the double effect of the impact, for the blow may produce (1) disturbances which are direct and chiefly of local consequence, and (2) those which are indirect and lead to solutions of a continuity at a distance, setting aside for the moment its irregularities and considering the skull to be an elastic globe, an impact will momentarily lessen its diameter in line of the blow, and force nearer together the point or pole of impact and the point on the sphere diametrically opposite. As the impact forces the pole together it will at the same time bulge out the sides of the sphere and thus increase the equatorial circumference and, in a lesser degree, the circumference of all the other circular planes which lie perpendicular to the polar diameter. If the distortion following the impact is inconsiderable the skull, owing to the elastic rebound,

* Read before Bernalillo County Medical Society, April 7th, 1909.

will resume its former shape unimpaired. If the distortion, on the other hand, is so great as to overcome the molecular cohesion of the bony particles, they will be disrupted. This may take place (1) as a rupture or bursting of the bone in parts remote from the poles of impact where cranial dimensions have been increased to the point of overcoming tensile strength of the particles, and (2) as a local indentation at the pole of impact where cranial dimensions have been diminished to the point of overcoming the local resistance of the particles to pressure. These two qualities of elasticity—tensile strength and resistance to pressure—have been the objects of special study by Rauber, who has shown that resistance to pressure is a third greater than tensile strength. This, however, does not mean that fractures are less likely to occur at the pole of impact than at a distance, for other factors come into play.

To illustrate: Not long since I had a case of a man who fell in getting off a street car which was going at a rapid speed. He received the full force of the fall on the external occipital protuberance, there was no fracture at this location or the other end of the pole, but an angry fracture running almost the entire meridian that passed over the vault in line of the sagittal suture. Another case I had since was that of a young man who fell about eight or ten feet on a bed of small stones. The place of the impact was in the temporal region where there was a depressed fracture about the size of a 25-cent piece, no fracture at other pole or in any meridian connecting the poles, the injury being limited to the area immediately surrounding the pole of impact due to the thinness of the bone in this region. This all goes to show that the place receiving the blow and the charac-

ter of the blow have a great deal to do with our diagnosis of the extent of the fracture previous to operation or autopsy.

We must remember that a blow from a body with a comparatively small surface, expends its force quickly and a rebound occurs before the form of the skull, as a whole, has been sufficiently altered to produce lesions at a distance. These fractures are usually on the exposed vault and they are the ones where the inner table only is fractured. On the other hand, blows received from a flat surface are prone to cause effect at a distance just as a concentrated one from a small body is apt to produce local effects. Most of the fractures of the base are caused from a diffuse blow, oftentimes very remote from the point of impact.

Mortality.—Disregarding the etiological factor, the patient's age and also the character of the injury, about one-third of all cases in the past have proved fatal, and as the fatalities are largely due to the immediate cerebral complications, modern methods of treatment have not served to greatly alter these figures. The percentage of fatalities increases with age,—the younger the individual the more favorable the outcome. Fractures of the base are commonly thought to be attended with a higher mortality than those of the vault, though with our improved diagnostic measures, (lumber puncture, for example) we may find that many cases of simple basal fracture have heretofore been overlooked and regarded merely as concussion—a fact which may make one's percentage of recoveries at least appear larger today. Excluding those cases which have died as an immediate result of the injury and those which have later succumbed to infection, the average duration of life in the fatal cases is said to be forty-four hours; so

that there is some basis for the old rule, adhered to by Gergmann and Wagner, that survival over two days gives a favorable prognosis.

Prognosis.—Is in no way proportionate to the extent of the cranial injury, but depends almost entirely to the ultra cranial lesion. An insignificant crack of base, associated with a focal hemorrhage in pons or medulla, may put a sudden end to life; whereas an extensive fragmentation of the vault which allows for considerable cerebral expansion, may actually save life through decompression. An insignificant punctured fracture which does not even produce concussion may prove fatal from meningitis or abscess later on; a comminuted and depressed compound fracture, on the other hand, may heal practically untreated and give few symptoms.

Diagnosis.—The diagnosis of fractures of the vault may offer difficulties, particularly in the case of linear fissures and of those involving the inner table alone. One, however, is much more apt to be misled by the peculiar feel of the infiltrated edge of a subaponeurotic extravasation into making a faulty diagnosis than to overlook a cranial fracture when it is actually present. When the scalp is intact, linear fractures may at times be recognized through lines of tenderness on pressure, particularly over the temporal fossa, and by a changed percussion note if there is any paying of the fissure. In open wounds there should be no difficulty in recognizing even a closely approximated fissure, owing to the blood which oozes from between its edges; sutures, however, may be mistaken for fissures.

In fractures involving the base alone we must, in the long run, depend entirely upon the symptoms which we have learned to recognize as common accom-

paniments of these injuries rather than upon any direct evidence of the bony lesion.

Evidence from intracranial or extracranial bleeding, either free or into the tissues, is of particular value.

The intracranial extravasations usually take place into the subdural space, owing to its close attachment, the dura is usually torn when the bones are fissured. The amount may be small or so extensive as to cause rapidly fatal compression. It may be recognized by finding evenly distributed red blood corpuscles in the cerebrospinal fluid withdrawn from lumbar puncture.

The extracranial extravasations may also be free, and bleeding may take place from the nose, mouth or ears, in case the ethmoid, the accessory sinuses, the eustachian tube, or the tympanic cavity have been implicated. It goes without saying we must exclude a bloody nose or ruptured tympanum. Ecchymoses is slow to appear. They are common in the orbit under the eyelids, or conjunctiva when the frontal plate is injured, and in fractures of the middle and posterior fossae they find their way to the surface over the mastoid process or down the neck after some days.

Complications are often an aid to diagnosis especially where certain nerves are involved.

Treatment.—Gun shot fracture itself is the least of the ills following cranial gunshot wounds and cannot be considered apart from the other complications. If there is a cleancut perforation and no serious immediate symptoms the wound may be left with a simple drain and healing may take place without incident; for unless septic foreign particles have been carried in with the missile, its track quickly cicatrizes and the bullet itself becomes encapsulated. If

there is a lacerated scalp and considerable local comminution of the skull it is advisable, after paring the edges of the scalp wound, to enlarge it by incision and to trephine the skull in order to readjust any depressed fragments, to evacuate clots, to relieve tension, and to afford better drainage. A large defect almost always leads to a hernia and perhaps to a fungus cerebri, owing to the swelling of the lacerated brain. Largely owing to this, drainage of the track of the bullet is a most unsatisfactory procedure, and one must usually be satisfied with a superficial drain down to the dura and brain, but not far into the latter. The temptation to probe for, to locate, and to extract deep-lying fragments of the bullet should be resisted by the surgeon; for even if successful in their object these procedures usually serve merely to increase the damage already done by the missile without conferring any benefit whatever from its removal.

The late complications must be met as are those due to cranial injuries from other causes, and here again it must be borne in mind that the paralyses and mental disturbances are not due to the presence of the foreign body, but to the cicatricial changes in the nervous tissue due to its passage through them, and that they consequently are the same whether the bullet has lodged, emerged, or been removed.

Treatment of Fractures Other Than Gunshot.—Again we are confronted by the insignificance of the fracture compared to the complications. In fracture of the vault the indications for surgical intervention are usually deformation of fragments. In fractures of base it is entirely different for here deformation is generally absent and intracranial complications are especially serious.

In compound injuries of the vault we may easily determine the form and estimate the consequences of the injury, and our endeavor should be to thoroughly cleanse the wound, to elevate depressed fragments, to restore a wound in the dura if one exists, and to leave the parts as nearly in their natural position as possible. If the fragments are depressed and wedged it may be necessary to trephine at the edge of the depression before they can be pried into place. Even in the absence of visible depression an opening may be required when cerebral symptoms are present, due to depression from the inner table alone or to intercranial hemorrhage.

It is another matter when injuries of vault are covered by intact scalp for there may often be great difficulty in determining whether there is sufficient justification to transform a simple into a compound fracture, but this is to be decided by the surgeon in charge.

The treatment of basal fracture resolves itself largely into treatment of contusion or compression of varying degrees, for which our therapy is largely restricted to rest, absolute quiet, an ice-cap, sedatives when headache is severe or when there is great restlessness, and to free evacuation of the bowels preferably with a saline—measures to be observed in practically all cases of cranial injury. The greatest care should always be exercised in handling and in transporting any case of fracture with intracranial symptoms for the symptoms are much aggravated by any form of jolting.

As for special indications for surgical interference and technique I would refer you to the various works on this subject.

Next meeting at Roswell, September 15-16, 1909.

**ACUTE INTESTINAL DISEASES OF
OF CHILDREN.***

By Dr. C. E. Luke³.

In presenting this paper as an introductory to our discussion of this important topic I shall not attempt to deal with all manifestations of diseased conditions of the intestinal tract, I will not enter into a discussion of the pathology of the diseases of which I do write, but name quickly some of the commoner forms met with in our practice and offer suggestions as to the etiology and symptoms and clinical course.

To be named in the acute intestinal diseases of children are, Acute intestinal obstruction, appendicitis, acute ptomaine poisoning, and Acute Catarrhal Enteritis.

The two latter forms will consume the brief time allotted to this paper.

Acute Ptomaine Poisoning.

When the case is presented of a child previously in good health, who has been seized with vomiting, with great prostration, or collapse, with diarrhoea probably but without abdominal pain in many cases, acute Ptomaine poisoning may be suspected.

The history of the child's having eaten, not always recently, of food consisting of tinned meat, fish or shell fish or sometimes alleged fresh fish one may have a clue to the nature of the illness and this will be corroborated if there is a story of other members of the family having been similarly attacked, although in elder members of the family the symptoms may have been so slight as not to have occasioned special notice.

The children on the other hand will present a case of marked symptoms which end in collapse and death.

Treatment.—Elimination. Stomach should be washed with warm saline solutions. Calomel, grs. 2-3 with a drachm each of Sulphate of Magnesia and soda may be introduced into the stomach, and salines continued until free purgation.

Patient should be kept in bed, surrounded with hot water bottles. Food should be withheld, but ice to suck, a little brandy or hot water. Hot fomentations may be applied to relieve pain if complained of. Opium should not be given, pain and restlessness may be relieved by Chloral Hydrate or Pot. Bromide. Stimulation by strychnine, adrenalin, digitalin or caffeine.

Acute Summer Diarrhoea, or Enteritis.

Diarrhoea is the premonitory sign of acute intestinal disturbance in infancy and childhood.

It may arise in connection with a constitutional affection such as rickets, from an overloaded bowel, sometimes from excessive peristalsis caused of nervous origin.

Acute catarrhal enteritis may be caused by overfeeding, too frequent feeding or improper food, the condition is oftentimes apyrexial but if not checked or if the absorption of toxines has been rapid the temperature may rise quickly to a point very alarming to the family of the patient.

The acute summer diarrhoea or summer complaint is an affection, as the name implies of the hot season, the hot-

* Read before the Bernalillo County Medical Society, July 1, 1909.

ter the summer the greater is the prevalence and severity of this disease, it seems sometimes to be epidemic in character.

The cause of the disease may be laid to two sources, the prostration and debility caused by the excessive heat, and as I believe by the favorable conditions at this hot season for the growth of pathogenic organisms in the food supply, the rapidity with which fermentation occurs, and the entrance into the milk or other food stuffs of germ-laden dust and dirt and the direct introduction of disease germs through that worst of all enemies to the human race, the house fly.

The disease runs a very acute course, it may run for from four days to a week or the child may be in a moribund condition at the end of twenty-four hours.

The onset of the disease is usually sudden, but there may have been a disturbance of the gastro-intestinal tract for a few days before the trouble occasions alarm, the child becomes irritable and refuses food or vomits after each meal, the temperature rises and the diarrhoea becomes pronounced, the motions are watery and grey or greenish matter is in evidence, there is much mucus often blood stained. The stools are at first extremely offensive, there is a feeble and rapid pulse and the extremities are cold and blue, the constitutional disturbance is marked and the tissues seem to be shrivelling. Convulsions may occur or coma may come on quickly, the temperature may be very high or subnormal.

Preventive Treatment.—If the custom obtained in this country which is reputed to hold in China and the physician was only paid as long as his patient remained in health, and there could be some way devised to enforce proper

care of infants by their nurses, many babies' lives would be saved. I coincide with the instructions given in the free lecture to mothers at the Paddington Green Children's Hospital in London, Eng. The following is also printed and given to homes by free distribution:

Instructions to Mothers and Nurses.

In hot weather milk quickly turns sour or becomes tainted by dust, dirt and flies and may easily bring on diarrhoea unless the following precautions are taken:

"Buy the cows milk twice a day, not once only—and get the best milk you can, as cheap milk is always dangerous.

Boil it at once for one or two minutes. Then place it in a covered vessel in a basin of cold water to keep it cool. The milk must be covered to prevent dust and flies from reaching it. Always taste the milk, in a spoon, before putting it in a bottle, to see that it has not turned sour. Do not put the nipple in your own mouth at all.

"Do not keep any milk which may be left in the bottle for the infant's next meal, use it for other purposes.

The bottle should be boat shaped with an India rubber nipple, but no long rubber tube.

The bottle should be scalded out after use, and cleaned with a bottle brush, which should be boiled immediately before using.

After each feed the nipple should be turned inside out and washed, and kept with the bottle in cold, or salt water.

Good milk is often spoiled by dirty bottles.

When fresh cows milk cannot be obtained, or the milk has turned sour, use the best sweetened condensed milk.

Get small tins, as after the tin is opened the milk will soon go bad.

"Cover an opened tin with clean mus-

lin or butter cloth to protect from the dust and flies and keep in a cool place.

In any case of sudden diarrhoea or vomiting stop the milk at once, give only plain water which has been boiled, or even barley water, and take the baby to a doctor without delay.

Do not think the diarrhoea will soon pass off, as the baby may be so ill in twenty-four hours that no treatment will be of any use.

Do not be afraid the baby will starve if only plain water or barley water is used for a day or two. There is no danger of this.

"Do not think when a baby cries or is sick that it only wants more food.

"In hot weather do not keep bones, stale vegetables or fruit, and other rubbish for the dust bin in the room or house. Burn as much of the rubbish as possible. Rubbish breeds flies, and flies poison the food they settle on."

I shall not continue this paper with suggestions as to the treatment beyond these words:

The further introduction of the poison into the system should be prevented. Food which will furnish a suitable media for the growth of the organisms should be withheld, the fact that this is an acute infectious disease should be recognized and care taken for the disinfection of the hands of the nurse and the vessels or cloths that come in contact with the stools.

The treatment should be evacuant and eliminative. The first object should be to remove the poison from the gastrointestinal tract and then to eliminate from the blood and tissues the organisms and toxins which found an entrance and set up the intestinal disturbance to be corrected.

Next meeting at Roswell, September 15-16, 1909.

HEADACHES.*

By Dr. J. A. Reidy, Albuquerque.

I propose in this paper to consider only headaches in which diffused pain in the head is the principal complaint of the patient. Headache is the name given to diffuse pain affecting different parts of the head and not confined to the tract of any particular nerve. Headaches are to be distinguished from neuralgias, and from head pain known as migraine. Headaches are diffused pains caused as a rule by irritation located in or referred to the peripheral ends of the fifth nerve. Their seat is usually within the skull.

Neuralgias, on the other hand, are caused by irritation of the ganglia, or trunks of the nerves. The pains are local and confined to single branches of the nerve. Migraine is a periodical neurosis in which there is an explosion of nerve force not only affecting fifth nerve, but other cranial nerves as well. It is a general disease of which the headache is only one symptom.

Headache is the most common of nervous symptoms. Twenty-five per cent of men and fifty per cent of women are subject to it more or less. Most cases of headache occur between the ages of eight and twenty-five, especially in females. Early childhood and declining years are particularly exempt from chronic and functional headaches.

Headaches may be classified in accordance with their location and the character of the pain. We have accordingly,—Frontal, occipital, parietal temporal, verticle, diffused, or a combination of any of the above. The kind of pain differs with different persons and with different causes.

In studying cases of chronic headaches it is always our first endeavor to

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obtain the most precise description as to location of the pain, character of the pain, spots of tenderness in the head, and if possible, find out at the time, the cause of the present attack. Then proceed to make a physical examination of past and present history.

First family history as to heredity, nervous tendencies, worries from business, etc. Personal habits as to care of diet, condition of bowels, menstrual function, as to what extent they use coffee, tea, tobacco, alcohol, occupation, amount of exercise, fresh air, etc.

Make examination of blood vessels, blood, urine, reflexes, eyes, teeth, ears, nose, pelvic organs, etc.

Headaches may be classified according to the cause under the following headings:

1st—Toxic, those due to ptomaine or leucomaine poisoning, Bright's disease, constipation and various intestinal disorders.

2nd—Neurasthenic or persons with a neurophatic diathesis.

3rd—Vaso motor congestive, arteriosclerosis.

Anemia—In anemia the patient often describes the sensation of fullness on top of the head, or a feeling as if the top of the head was going to come off. Anemia of the brain, as a rule, is a part of a general condition—of anemia and malnutrition. The headache may be verticle, frontal or diffused, and is often associated with syncope and dizziness. The pupils, as a rule, are dilated. The recumbent position relieves the headache, but it immediately returns on arising. In such a headache if the anemic condition is corrected the headache should leave.

Toxic headaches are most commonly described as involving the whole of the head, or as a tight band of pain encircling the head. The time of occurrence

of toxemic headaches has some relation as to absorption of the poison.

The morning headache of men who have spent the night at a banquet and indulged too freely is readily cleared up when the cause is removed. Constipation is perhaps the most fruitful of all causes of headache, and it is all the more insidious because women become so habituated to the condition of sluggish bowels that they fail to realize the importance of its bearing upon their general health. Constipation is not incompatible with apparent health for some persons may be constipated for a week or more at a time without any complaint of digestive trouble or headache.

No doubt most physicians have seen patients, (domestic help, as a rule) consult them for some minor ailment and when questioned in regard to the bowels will have to figure back for a week or so or consult the calendar to be sure when they had the last action of the bowels. A great many people of this class seem to be immune from headaches. The higher up in the human scale we go the more susceptible people seem to headache of all forms.

Uremic headache due to renal disease is of very common occurrence. The pain is usually situated in the occipital region extending to the neck. It may be associated with somnolence, nausea, vomiting, and vertigo, simulating brain tumors. But an examination of the urine, the eyes and the heart as a rule will clear up the diagnosis.

For relief of headaches caused by high arterial tension the different nitrates are of inestimable value. Nitro glycerine in grain 1-100 every three hours until the tension is relieved; sodium nitrate in $\frac{1}{2}$ grain doses three times daily is an excellent remedy where the arterial tension is high from any cause.

Sometimes headaches occurring every day or every other day at about the same time will clear up by giving a few doses of quinine used in the same way as for malaria. You can generally get a history of malaria in the past.

Headaches caused from pelvic trouble in women—the headache occurring only at the time of menstruation is by no means necessarily due to any derangement of the pelvic organs. The most normal woman is more inclined to be nervous at that time and the resisting power is lowered. Retrodisplacement of the uterus posterior parametritis, polypi, subinvolution, prolapsed ovaries, adhesions, etc.

The pain is almost always verticle if due to disease of the body or endometritis. Occipital when due to retrodisplacement. The headache as a rule is worse during menstruation.

The occipital headaches of uterine and ovarian displacement are aggravated by walking or standing.

The stomach; hyperacidity, deficiencies of the normal acid, or the presence of food undigested from any cause. These headaches are frontal and bilateral as a rule. When such a headache is due to undigested food remaining in the stomach, it is quickly relieved by vomiting, or washing the stomach.

The teeth, especially decayed teeth in the upper jaw, the lower wisdom teeth on account of impaction at times, produce a headache which is unilateral. The upper first molar and second bicuspid by communication with the antrum of Highmore may become decayed and start an abscess in the antrum. The headaches in such cases are diffused covering the forehead and temples.

Nasal polyps may give the first evidence of their presence in the severe headaches they provoke. Mouth breathers or a difficulty in breathing, especially if marked at the time of the headache,

should call for an examination of the respiratory passages.

Some patients date their headaches from an over-exposure to the sun or a slight sunstroke. The least exposure to rays of the sun or fatigue serves to bring on an attack afterwards.

The most persistent and distressing form of headache is that which occurs in patients with intracranial tumors. It is one of the most constant of symptoms, as a rule the headache is very severe and continuous. The headache exists even in delirium. This fact distinguishes it from the headache of fever which ceases in delirium.

In cerebral abscess headache is the earliest and most constant symptom, just as in brain tumor, but the pain is generally referred to the seat of the abscess.

Intracranial Syphilis. — Headache may antedate all other symptoms of intracranial syphilis for several months or a year. It often occurs in paroxysms or there are periodical exacerbations in which the pain becomes intolerable. Generally the pains are more severe toward evening or night and prevent sleep. Extreme tenderness on pressure upon the skull occurs only when the periosteum or bones are involved at the same time.

Treatment.

The most important element in the treatment of patients with headache being the recognition of the cause as the pain is more often dependent upon some underlying constitutional condition than intracranial disease.

In all forms of headache it is essential that the intestines be kept free from fecal accumulations and that the action of the digestive organs be regulated with a suitable diet. Headache from constipation is readily relieved by a brisk cathartic.

All supposedly reflex causes should

be removed as far as possible. Many patients seem to develop headache upon the slightest provocation, they seem to have an inherited predisposition. It is generally desirable that any existing error of refraction or eye muscle defect be corrected. Even when such conditions are discovered and remedied relief from the headache does not always follow. Operating upon the nose for deviated septum, removal of adonoids or nasal polypi will be followed by relief from a chronic headache.

Headaches due to cerebral congestion may be relieved by avoiding all forms of cerebral stimulation, mental or physical excitement, keeping bowels in good order by calomel and salines.

In severe cases you may have to resort to venesection. In headaches from anemia rest, iron and nutritious food. In most all forms of headache when called upon for relief the patient cannot wait for a systematic examination, they come for relief from distressing pain whatever the cause may be, then we have to resort to some form of treatment to give them temporary relief, or in other words, symptomatic treatment, which consists of different coal tar products, antifebrin, phenacetine, salicylate of sodium, caffeine, and sometimes morphine.

Phenacetine often needs to be given in large doses, 15 to 20 grains. Muriate of ammonia is very good but the dose is large, from 40 to 60 grains, well diluted. Menthol in doses of from 5 to 10 grains in hot water sometimes stops headaches. I was called to see a patient about one year ago who took two drachms of acetanalid at one time for relief of headache. She was very cyanotic with a rapid, thready pulse. I gave one-tenth grain of apomorphine, and one-fifteenth grain of strychnia sulphate

hypodermically, and in a few hours she was as well as ever and assured me she had no headache.

In case of brain tumor it is good judgment to start a patient on anti-syphilitic treatment and give them the benefit of the doubt as to possible gummatous growth. The operation of trephining the skull should be resorted to when all other methods fail, to relieve the pain.

DIAGNOSIS OF APPENDICITIS.*

By Dr. W. L. Bishop, Billings, Montana.

It is not, as is generally supposed, the want of a safe and proper treatment for appendicitis but, rather, a lack of ability to diagnosticate appendicitis itself which continues to render the complications of appendicitis a more or less hazardous undertaking.

Appendicitis, when treated by operation and removal of the Appendix Veriformis, does not, practically speaking, have any mortality.

The credited mortality in appendicitis is the mortality of the complications following appendicitis, rather than the mortality of the disease itself and is due, in my opinion, to the lack of a definite rule for the diagnosis of simple uncomplicated appendicitis, and the failure to remove the Vermiform Appendix in all of the cases of simple, uncomplicated diseases of that organ.

The published mortality of appendicitis is particularly misleading to the public and, in consequence, many cases presenting a condition for safe operation, are carried into an unsafe condition for the reason that the patient, or his lay brothers and sisters, have in mind some death following an operation for some complication of appendicitis, which was known simply as ap-

* Read before Montana State Medical Society at Butte.

pendicitis by the community and so labeled by the public press.

This publication by the press is never qualified and the public considers every case of appendicitis to be like every other case of appendicitis.

As I have intimated, these errors are for fatal procrastination in a very large number of cases.

The general practitioners have not been taught the proper way to diagnose this disease, except in its so-called typical type and presenting all of the many symptoms and physical signs of the disease while, as a matter of fact, the majority of the patients suffering from this affection have atypical symptoms and, with one exception, atypical physical signs.

In my experience of several hundred cases, I have found tenderness present in all of the cases and, yet, the general practitioner depends less upon this physical sign in making a diagnosis than upon any other symptom or physical sign.

Not only the general practitioner, but every attendant upon the sick, should be taught that tenderness is the only sign necessary to a diagnosis and that all cases presenting this tender appendix should have that appendix removed.

Not even a suggestion of any other treatment should be mentioned.

This tenderness can be elicited by very gentle palpation with the patient brought well over the right edge of the bed and counter pressure, with the thenar and hypothenar eminences of the right hand in the loin space.

By flexing the fingers, at first gently, and making pressure only during expiration and palpating with the palmar pulp of the fingers, there can frequently be appreciated a tenderness (often of very small extent) and, by a further

manipulation, the appendix itself can many times be mapped out.

The profession at large have not been impressed with the importance of these seemingly unimportant details of palpation and I have frequently observed individuals possessing the greatest mechanical skill in operative surgery, who fairly punched the patient in the belly when examining for appendicitis.

Another very frequent error is to examine with the pulp of the ends of the fingers and an examination, thus made, will leave small grooves in the integument of the abdomen, as evidence of the pressure with the finger nails, which latter cannot reveal anything in this disease. The pulp of the ends of the fingers is not as sensitive as the pulp on the palmar surface of the fingers.

By rubbing the thumb first on the end and then on the palmar pulp this latter fact will be easily demonstrated to anyone.

Fowler (Appendicitis Second Edition 1902, pages 54 and 55) has said that, "Generally speaking, an early and considerable elevation of temperature and rapid pulse rate accompany a high degree of inflammation with tendency to early perforation or gangrene; but the reverse of this is not true. I have known perforation to occur before the formation of protecting walls of adhesions, with a pulse of eighty (80) and a temperature of ninety-nine (99) degrees (Fahrenheit)."

Time after time I have had moribund cases brought to me for operation where several days or even weeks had elapsed since the beginning of the attack. Several of the physicians who brought these cases have said that, in the first place, they were not sure of the diagnosis for the reason that the pain was so slight and not at "McBurney's Point," or the fever was not high and

the pulse rate but slightly accelerated; that the facial expression did not indicate a grave condition or the vomiting, if present, was only slight; that there was not any tympany and that the rectus abdominus muscle was not very rigid. A few of the bacteriologists have said, as an excuse, that there were a normal number of leucocytes.

The general practitioner will diagnose, as I have intimated, the typical cases and, usually, this means not appendicitis but some complication such as peritonitis, gangrene or rupture of the appendix, abscess or general peritonitis.

Surgical masters have been laboring strenuously to train the general practitioner how to treat the disease yet, in describing the symptoms of the disease, these same surgical masters have described the symptoms present in some complication of appendicitis and have omitted the information that appendicitis itself has but one invariable sign and that one sign is that of tenderness, which, by careful palpation, may be elicited.

Take a case of a young married woman who four months before had given birth to a robust, healthy child and who, three months after the birth of this child, had a pain in the right iliac fossa. One month later another pain in the abdomen which was relieved by one act of vomiting.

I was called in consultation with the family physician. No history was given me before I entered the patient's room. This young woman received us with a pleasant, happy smile on her face and, cheerfully, gave the short history of her case.

Her temperature was absolutely normal, her pulse rate seventy (70), tongue clear, bowels rather loose, not any pain, abdomen soft. Palpation revealed a tender appendix about one inch

below and only slightly to the right of the Umbilicus.

Upon being urged to give my opinion to the patient, I said that here was a case of appendicitis which should be operated upon at once. This same opinion, I then learned, had been given by the family physician who, by the way, is also a skillful surgeon.

Not being satisfied with this, a third medical man was called and gave as his opinion, that, while the patient might be suffering from appendicitis, still the symptoms were so mild that were the patient his sister, he would not consent to an operation.

Two days later a completely disorganized, ruptured appendix was removed by a Deer Lodge surgeon. Fowler (Appendicitis. Second Addition. 1902. Page 58) writes as follows, "The *subacute* variety is not to be looked upon as an innocent form of the disease. Although the febrile action is slight, and the pain and tenderness such as occasion no alarm, these insidious symptoms may be replaced, *without warning*, by those indicating the occurrence of perforation and diffuse septic peritonitis; or the latter may come on without perforation."

Such cases have been observed by me so very frequently that I am of the opinion that the average general practitioner is not sufficiently impressed with the idea of making his diagnosis by palpation alone, and clinching the case for operation on this one sign.

It is a fact that, in the smaller towns, where there is usually, one or more competent surgeons, the deaths following an operation have been and are charged to the operating surgeon and he alone is held responsible. This condition prevails in every section of the United States and it is to place the blame for these deaths where it properly belongs that this paper is written.

It is a matter of fact that hundreds of cases of appendicitis, cholelithiasis and pyloric obstruction have left Montana to go to the so-called surgical centres and there be informed, for the first time, of their real pathological condition when they had previously been treated for biliousness, intestinal indigestion or nervous dyspepsia.

Orbison (The American Journal of the Medical Sciences, Vol. CXXXV. No. 4. April, 1908. Page 562.) in an article, "Neurasthenia of Auto Intoxication," has this to say, "Dr. John Gibbon was consulted. His examination fully upheld the diagnosis and his opinion was that the nature of the obstruction was the presence of adhesions in the appendicular region. We held to this although there was not any history of appendicitis or acute pain in that part of the abdomen."

Orbison gives the after history of this case and reports a cure of the neurasthenia following the removal of the appendix.

In the same article (page 561) it is said, "His condition has been diagnosed neurasthenia, hysteria, general nervousness and hypochondriasis by competent observers of repute."

When a patient presenting the atypical symptoms of appendicitis and who resides in the smaller cities and towns, is told an operation must be performed, what is the result?

The family physician is called or some friend's family physician is called, and that settles it.

You may just as well stop the boiling of the water. These same men who fail to recognize the atypical cases of appendicitis will say that, it is all very well for you to charge us with not making the diagnosis of appendicitis but, you have not told of the number of operations where a normal appendix has been removed.

In answer to this, I would say that I am going to tell of those cases right now and will begin with the statement, that the number of such cases is very much smaller than you think.

The average medical man knows little about the pathology of appendicitis and, unless one shows pus or gangrene or a ruptured appendix at operation, this average medical man will go home to tell his friends that he saw Doctor So and So remove an appendix which was perfectly normal.

The truth is, however, that that same appendix will, when returned from the pathological laboratory, have a card attached to it and which reads, "A Very Badly Diseased Veriform Appendix."

This man who went home to tell his friends about Doctor So and So removing a normal appendix, did not have his fingers where Doctor So and So had his and, therefore, Mr. Home Going Man could not have seen the kinks and twists which were untwisted and unkinked before the appendix was delivered.

Nor did Mr. Home Going Man notice the remains of the numerous adhesions which were broken up.

You and I are looking at the condition from different angles and I take the view that I do not criticise the fellow who takes the clean appendix out but I do condemn the man who leaves the rotten appendix in.

Ochsner with his treatment and four per cent (4%) mortality and Murphy with his two per cent (2%) mortality in, "General Free Suppurating Peritonitis" are doing harm.

A considerable number of the general practitioners have argued that, if Ochsner beginning his treatment on the cases having been sick for three days and having a four per cent (4%) mortality, then they beginning the treat-

ment on the very first day, will have a mortality not exceeding one per cent (1%).

And, anyway, if there is then any trouble; the patient gets the "Murphy Treatment" including, as it does, the "Fowler Position" and proctoclysis and which only has a mortality of two per cent (2%).

If you surround the surgeons with practitioners, who have eyes in the ends of their fingers, there will not be any need for either the Ochsner or the Murphy treatments.

ARTICULAR RHEUMATISM.*

By Dr. F. J. Patchin, Albuquerque.

May arise from germs closely related and possibly allied to the organisms of scarlatina and of erysipelas.

I had one very severe case follow a mild case of diphtheria. I think these organisms enter the system through the mouth, nose and throat. At least many of the cases that I have treated have shown slight or severe symptoms of these organs previous to the rheumatic attack. We do not know just how they affect the fluids and tissues of the body, especially the nervous function and the vaso-motor apparatus, and the organs of circulation.

We know that the blood, urine and the sweat are modified.

To me the odor of a rheumatic sweat is just as diagnostic of the disease as is the sweat odor of measles or of typhoid fever is diagnostic of those diseases.

The blood contains an excess of fibrin and may contain an excess of lactic acid.

I believe as much in the bacterial origin of Articular Rheumatism as I do in the germ theory of tetany or of meningitis.

I think diathesis or an idiosyncrasy

as well as other diseases or conditions that lower the vital forces may favor the susceptibility to the infection just as we contract erysipelas or La Grippe.

I do not think climatic conditions have very much to do with it. Without undue exposure to cold and dampness or fatigue, or improper diet; a lack in keeping the excretory organs performing their proper functions. While the germ theories are in their infancy of development and nature of how they affect the entrance into the human system. We should encourage microscopic research and at the same time we should devote more time in the study of man and his environments, as to diet, sleep, rest, and exercise, and the benefit of sunshine, and how to get away from nervous strain.

Take a new lease on life and you will have a greater resistance to the bacterial inroads to the human system.

Acute Articular Rheumatism

is a self-limited disease lasting, untreated, for about six weeks.

Symptoms.—An elevation of the temperature, acid or sour smelling perspiration, pain, redness, and swelling of the joints, often with effusion. I have observed several cases with nodules of the tendons and faciae, the joints and other structures are rich in white fibrous tissue the joint may be fungacious. Sometimes the disease is ushered in by a chill. In my experience I find nervous, fleshy or stout people more commonly affected. This class of patients are more liable to be constipated and excrete less of the urates and other excreta.

Complications.—The most common is endocarditis (about 25% are pericarditis and myocarditis). The later symptoms are more common to children.

* Read before Bernalillo County Medical Society January 8, 1908.

I have had very few deaths in the twenty-seven years I have practiced medicine caused by rheumatism of the heart. But to the painstaking practitioner who has studied his rheumatic case thoroughly and has progressed fairly well with his case, and there is a sudden rise of two or three degrees of temperature, irregular pulse, palpitation, dyspnoea, face cyanotic, and an anxious look you may detect friction sounds.

It is about time the doctor should get anxious and look for a fatal result in twenty-four to forty-eight hours. You will never after fail to watch the heart. The prognosis of this disease is generally favorable.

Unfavorable symptoms are hyperpyrexia, urine low in solids, previous cardiac disease, delirium and coma and relapses.

Treatment.—First is dress. Put patient to bed in flannel gowns open all the way down in front, also between woolen blankets, on woolen pillow slips. A soft but firm woolen mattress or a high, narrow bedstead or cot in a well-ventilated sick room free from drafts of air. The temperature about 75 degrees Fahrenheit. Keep the patient as near absolutely at rest as possible, enveloping all the affected joints in raw cotton, held on by roller bandages. After you have thoroughly applied flannels wrung out of solutions of nitrate or carbonate of potash for half an hour or more, then apply Liniment Aconite Co. or Veratrum Ointment or oil of Gaultheria, then apply cotton and roller bandage. Give Aconite, and Colchicum sem and Salicylate of Sodium to reduce the fever and pain. Would give small doses of some form of mercury.

The Salicylates modify metabolism,

the uric acid is increased also is the excretion of the nitrogen and sulphur. I think the Salicylates are the better treatment for young patients, unless complicated by Cardiac symptoms, then the alkalis are indicated. If I had it I would try Menges Serum or the anti-streptococcus serum early in the disease. If obtainable, use glycerine suppositories to evacuate the bowels, or the salines. Ferrum and Quinine; give codien to relieve pain. Would use opiates cautiously; gentle massage. Keep the teeth and mouth and throat clean. Remove any enlarged tonsils. You can do much better surgery with tenaculum or forceps to pick up the base of tonsils between the pillars. Enucleate thoroughly, use alkaline spray to cleanse the nose and throat. Individualize your cases. I can not tell you why alkalis are better for cardiac complications, unless they break up the fibrin and produce anemia.

Diet.—During acute stage, milk or bread and milk, milk toast, buttermilk, skim milk, junket, gruel, and vegetables, cereals and nuts.

The carbohydrates should be restricted just enough to keep up nutrition. Avoid meats of all kinds, and hashes, pickles, sweets and pastry; give plenty of good pure water. Keep this order of diet up for two weeks. Do not give meats until the end of the sixth week, when convalescence begins. Do not forget the *rest* and absolute rest for the patient and do not forget to examine the heart at each visit. I trust that what I have read will be of some benefit to the busy practitioner in the care of his rheumatic cases, affecting the joints. Other forms or kinds of the disease will be treated under their specific indications.

Don't forget the Roswell meeting, September 15-16, 1909.

NEPHRITIS OR BRIGHT'S DISEASE.*

By Dr. L. G. Rice.

Richard Bright in 1827 discovered that the coincidence of dropsy with albuminuria was referable to inflammation of the kidney; but as the morbid anatomy of the kidney was ill understood at that early date, more or less confusion has resulted in the nomenclature of renal disease, and the other extreme has been reached of attaching too much importance to an elaborate classification.

From a pathological view of the subject there is no better classification than that of Delafield's, with which I hope we are all familiar, but for all practical purposes the clinical classification is the one most suitable for our study tonight, and it is the one I will endeavor to follow. It is more simple but often overlaps the minute classification of morbid anatomy. Some writers would include under the term "Bright's Disease" all renal diseases accompanied by albuminuria, but others include only simple inflammatory and degenerate changes. One of the most serviceable definitions of nephritis, or Bright's Disease, is that emphasized by H. P. Loomis as restricted to all non-suppurative inflammations of the kidney. Every form of inflammation of the kidney involves *all* of its histological structures although in varying degrees. Both kidneys are concurrently involved to very nearly the same degree, and both kidneys may still retain areas of normal structure, a fact which enables them to functionate in spite of disease. The primary cause of all forms of renal inflammation should be regarded as Hematogenous, and hence as beginning through the vascular walls; so we will consider nephritis as a bilateral hematogenous, non-suppurative inflammation of the kidney. It is stated by most authorities that we can have albuminuria and casts without ne-

phritis. I contend that we cannot have albumin and casts except mucus casts and cylindroids, without nephritis, but we can have nephritis without albumin or discoverable cast, but even with these rare cases we are generally able to make a diagnosis from other symptoms and the conditions of the urine, such as daily amount, specific gravity, etc.

It has been estimated that eleven per cent of persons examined for life insurance show slight albuminuria without absolutely any other symptoms, and a large percentage of these never develop true nephritis.

As a result of microscopic examinations of over two thousand autopsies statistics of which were made while I was interne in Bellevue less than ten per cent of the subjects over forty years of age had absolutely normal kidneys.

According to the classification I intend to follow, nephritis is divided into acute and chronic forms. Chronic nephritis is again divided into chronic parenchymatous and chronic interstitial types.

Acute Nephritis.

In acute nephritis, the tubular, vascular, and interstitial tissues are simultaneously involved in different degrees in different cases. In the majority of cases the parenchyma, or secreting structure, is the first to become invaded.

Etiology.—The majority of cases occur in children and are caused by the poison of the acute infectious diseases, especially scarlet fever and diphtheria. Other known causes are exposure to cold and dampness when perspiring and exhausted, acute endocarditis, acute articular rheumatism, typhus, and typhoid fever, pneumonia, malaria, erysipelas, pyemia, jaundice, diabetes, skin diseases, including extensive burns, follicular tonsillitis, pregnancy, injury and

* Read before Bernalillo County Medical Society, February, 1908.

drugs, such as cantharides, turpentine, phosphorus, arsenic, nitrate of silver, operation on kidneys and tuberculosis. lead, mercury, and large quantities of alcohol. It is extremely a rare disease after forty years of age.

Gross Pathology.—The kidney is enlarged, may be twice the normal size, capsule strips off easily, surface is smooth and a mottled appearance due to irregular areas of congestion and anemia. The cut surface is covered with dark red blood but when washed has the same mottled appearance as outside surface.

Symptoms.—They are either sudden or gradual. The sudden consist of a pronounced chill with moderate temperature, dull aching, and tenderness over the kidneys, and prostration. The fever, however, may be absent, the urine is diminished in volume, dark colored, and contains albumin and epithelial and blood casts. If it is not a mild case, or improperly treated, soon extensive oedema shows in the face and extremities, and violent headache, vomiting, delirium, stupor, Cheyne-Stokes breathing, and convulsions usher in uremia. In the gradual form symptoms develop slowly, with mildness until there is an explosion, often initiated by exposure or strain as in parturition, in pregnancy where urine has not been repeatedly examined, the first symptoms may be a uremic convulsion. At first there is headache, nausea, irregularity of bowels, pronounced anemia, slight increased tension of pulse, urine persistently dark and high colored, puffiness of lower eyelids on rising in the morning, dyspnea on exertion, general weakness, skin dry and harsh, no fever. These symptoms improve or uremic attacks may supervene, as above mentioned. About ten per cent become chronic.

Diagnosis.—This is ordinarily quite easy, with a history of the case and a

urine examination there should be no difficulty whatever. It is interesting sometimes to know if it is an acute exacerbation of a chronic nephritis. This can be readily decided where we have a history of the case and there is hypertrophy of left ventricle with a marked accentuation of second sound and a high tension pulse. It is also interesting in convulsions of pregnancy to know if the condition is due to acute nephritis or toxemia of pregnancy. I consider all such uremic conditions in pregnancy, without fever, due to acute nephritis caused by the toxemia of pregnancy, which is demonstrated by autopsy findings, but we know very little about the kidney of the non-fatal or mild cases, nevertheless it does not alter the treatment in the least where uremic symptoms are present, except in the latter condition we should empty the uterus at once.

Treatment.—Preventative. A few years ago cure claimed most of our attention, was most sought, while prevention played a minor part. At the present day, while we abate in no way our search for a cure, prevention has come to the front and has of late probably been far more successful in checking the ravages of the disease. During and for some time after the diseases enumerated as causes we should study the pulse closely and make frequent examinations of the urine for it has been said that a brisk purge of something no stronger than compound jalap powder will prevent acute nephritis, if given in time. The amount of nitrogenous food should be diminished to a minimum, elimination should be aided by improving condition of bowels, kidneys, liver, skin and lungs. Keep patient in bed properly clothed until danger period is passed. In most cases we have to deal with the developed disease, our first endeavor should be absolute rest, warmth

and a suitable diet such as milk and vichy, or milk and lime water and in mild cases this is all that is necessary. Where there is much local distress or suppression of urine, pacquelin cautery, dry cupping or poultices should be used. Temporary or partial physiological rest for the kidneys is obtained by promoting activity of skin and intestines. The skin can be kept active by the use of the hot water bath, hot steam bath, hot air bath, or hot wet pack. I prefer the wet pack which is not so liable to produce faintness, in conjunction with this we should use hot drinks. If a dose of sweet spirits nitre and a little ipecac is given previous to the pack better results will be obtained. If more active measures are called for some of the preparation of Joborandi should be used. Pilocarpin, its active principal, should be used with caution and rarely ever given to children. After this treatment has been carried out we naturally look for some drug to increase the amount of urine and decrease the dropsical condition. There is nothing better than digitalis if we are careful to get a reliable preparation. I prefer the infusion in large doses often repeated until a decided effect is produced on pulse, then diminish dose of digitalis and use in conjunction a mixture of acetate, citrate, and bitartrate of potassium which will add water to the blood and keep kidneys flushed out.

Where the condition becomes one of uremia our treatment should be along the same line, but a little more energetic. The mistake is often made of being too heroic in our use of drugs. Use chloroform for first aid to control convulsions, use Croton oil or elaterium, two drops of the former, or one-quarter of a grain of the latter. Inject a dram of chloral hydrate in solution, high into rectum. Give one-third grain pilocarpin hypodermically to be re-

peated in half an hour if necessary. Put patient in a hot wet pack, and if convulsions continue after this treatment blood letting, transfusion, or hypodermoclysis should be performed. Morphine hypodermically in one-half grain doses is permissible in acute nephritis where there is no history of chronic nephritis. Elevate foot of bed and give almost continuously high hot saline enema, temperature 110 F. If the case is complicated by pregnancy empty uterus at once and give viratrum vide, dose of which is 10 to 20 minims.

To shorten this paper I have omitted everything in regard to the chronic forms except the treatment.

Treatment of Chronic Nephritis.

Preventative Treatment. — In both forms the cause is an irritant acting on the renal cells. In order to remove the irritant we must know what it is. Unfortunately it is often undiscoverable. As we prevent the acute infectious diseases from occurring and are prompt in their successful treatment, we therefore eliminate a large number of cases of nephritis, after these comes alcoholic excesses and excessive eating and indulgences in strong tea and coffee in large quantities.

Curative Treatment. — A keener judgment is required to treat a chronic case, for many need nothing but the withdrawal of the cause with proper hygienic and dietetic management, but we should advise these mild cases against exposure, fatigue, and overwork, to retire early and seek abundance of rest. Eat in moderation. Drink a moderate amount of fluids between meals, abstain from alcoholic drinks of all kinds, and remember in regard to foods it is more a matter of quantity than quality. A nightly warm bath with friction is a good procedure just at bed time.

In regard to the medical treatment directed to the kidney there is no drug

which will create new renal cells for those that have been replaced by connective tissues. One principal object must be to save the kidney from further irritation or destruction. Even in mild cases there is generally a tendency to anemia, which requires the administration of iron, but this remedy is too carelessly administered and often does more harm than good by causing constipation and locking up other secretions. Iron should be given in small doses in combination with a very small dose of bichloride of mercury well diluted. A regular sufficient action of the bowels is very essential. Purgatives acting on the liver are especially serviceable. To this end a weekly or bi-weekly dose of calomel is suitable. The iodides dilate the blood vessels and facilitate the onward movement, hence is an excellent remedy for almost constant use in many cases of chronic nephritis. Where there is much albumen and many casts and a more decided diuretic is called for theocin or diuretin generally works nicely. In the conditions where we have a very high tension pulse in conjunction with this treatment we should use nitroglycerine. Where we have a tendency to cardiac failure we should also use strychnine and digitalis or strophanthus.

Dr. Edebohl and others have had some excellent results from the operation of decapsulation for the cure of chronic Bright's disease. This operation should be performed in the chronic interstitial type.

Again wishing to shorten my paper I have said very little about special diet and climatic conditions, albuminuric retinitis, renal headaches and many other complications of chronic nephritis.

Don't forget the Roswell meeting, September 15-16, 1909.

OVERDOING THE POISON LABEL CAUTION.

It is perfectly proper for the protection of the public that real poisons, when they go out from the drug store, should be labeled as such, as is provided for by the laws of all of our states. But there is great danger that this salutary caution may be carried to such an extreme as to defeat the very end it aims at. For instances, the bill introduced by Congressman Mann in the House of Representatives contains a long list of drugs, including practically all chemicals to be found in the drug store, which, when they or their derivatives, or preparations containing same in even the smallest quantity, are dispensed or sold, must bear a label with the word "Poison" printed in large type in white on red background, or in red on white background, together with the skull and cross-bones device.

This means that if ever so small a quantity of paragoric, for instance, is contained in a mixture, the said mixture must have the scare label as if it were a really virulent poison.

As we have said, such a law will be apt to defeat its own purpose, for the reason that, when the people find the skull and cross-bones device and the poison label on practically every medicine, they will become so familiar with it that its effectiveness as a warning will be entirely lost, and many lives may be sacrificed in consequence.

Indeed, just such a result has followed similar extreme legislation in Russia. In that country the laws provide that the poison label shall be attached to a large number of substances, among which is the popular alcoholic drink Vodka. As an immense amount of this beverage is consumed, the poison label, instead of serving its purpose as a warning, finally, with the illiterate population, became identified with the

drink itself, with the consequence that really poisonous mixtures and substances, which also, of course, bore the poison label, were drunk by these people, under the impression that any bottle bearing the poison label contained Vodka.

That results similar in their consequences would follow the overdoing of the poison label business in this country is certain. With the poison label the saying that "familiarity breeds contempt," most aptly applies and if it appears on all medicines it will cease to attract any attention. We trust, therefore, that our legislatures, under the idea that they are protecting the people, will not commit the mistake of making the skull and cross-bones device so common that it will no longer serve as a caution.—National Druggist.

DAILY PRESS AND MAGAZINE ITEMS.

Rudyard Kipling to Doctors.

From the Newark Evening News,
April 21, 1909.

Rudyard Kipling distributed the prizes at the Middlesex Hospital and delighted his audience with a characteristic speech, writes a London correspondent of *The Medical Record*. He remarked that it might have escaped their professional observation that there were only two classes of mankind—doctors and patients. He had felt a delicacy in confessing he belonged to the latter ever since a doctor told him that all patients were great liars where their own symptoms were concerned. The average patient might regard the doctor as the non-combatant does the troops who fought for him. He had to address the army which is always fighting against death. It was unfortunate that death was bound to win in the long run. This fight is one of the most important things in the world and you who carry it on, he said, must be among the most important people. The

world certainly insists on this. It long ago decided you have no leisure that any one need respect.

Nothing but extreme illness can excuse you in its eyes for refusing help to anyone who thinks he needs you at any hour of the day or night. Nobody will care whether you are in your bed or in your bath—at church or a theatre. What vitality you have accumulated in your leisure will be dragged out of you again. In time of plague, pestilence, fire, battle, famine, murder and sudden death it is required of you to go on your duty at once and stay till your strength fails or your conscience relieves you, whichever be the longer period.

These are some of your obligations and not likely to grow lighter. Have you heard of any eight-hour bill for doctors? Do you know of any change in public opinion that will allow you to refuse to attend a patient who does not mean to pay? Have you heard any outcry against people who can well afford to pay but prefer to cadge around a free hospital and get advice, glass eyes and cork legs for nothing? I have not. It is required of you to save others at all moments. It is nowhere laid down that you must save yourselves.

You have been and always will be exposed to the contempt of the gifted amateur, the gent who knows by intuition everything that has cost you years of study. You have also been and always will be exposed to the attack of those persons who consider their own undisciplined emotions more important than the world's most bitter agonies—the people who would hamper and limit and cripple research because they fear that it may be accompanied by a little pain and suffering. Such people have been against you from the beginning, ever since the earliest Egyptians erected images in honor of cats and dogs on the banks of the Nile. But *your work will*

go on. You remain perhaps the only class that dares tell the world that no man can get more out of a machine than he puts into it, and that if the fathers have eaten forbidden fruit the children's teeth will be set on edge.

In a day when few things are called by their right names you are joining a profession in which it pays to tell the truth. Realizing these things, I need not task your patience by talking about the high ideals and lofty ethics of that profession—so I will wish you enough work to do and strength to do the work.

Next meeting at Roswell, September 15-16, 1909.

**WHEN MOMENTS ARE GOLDEN.
"A RADICAL REMEDY FOR
TUBERCULOSIS."
DEATHS.**

There are times in the experience of every practitioner when moments are precious—emergencies when there is not an instant to lose. A patient, let us say, is writhing in pain. To alleviate his suffering the physician must act promptly and with precision. Dependence in such a crisis, is usually upon a single little hypodermatic tablet. And that tablet, will it justify the faith? It is *medicinally active*? Is it *of full strength*? Is it *soluble*? These become living questions.

Too much stress cannot be laid upon the importance of solubility. And let it be remembered that flying to pieces in water is not the requirement. Many tablets do that—fine, undissolved particles settling to the bottom. This is mere disintegration, not solution; and such a tablet cannot be depended upon to yield the results that the practitioner desires and expects.

Obviously, the physician should exercise care in choosing his hypodermatic tablets. Let his source of supplies

be a house with a reputation for making tablets that are stable, active and of uniform strength; tablets that *dissolve promptly and completely*. Let him search out a brand of hypodermatic tablets that meet all of the requirements above set forth, and let him specify that brand.

The largest manufacturers of hypodermatic tablets in the world are Parke, Davis & Co. The hypodermatic tablets of this house are true to label. They are soluble. The materials entering into them are rigidly tested for purity and activity. Parke, Davis & Co.'s hypodermatic tablets are thoroughly trustworthy. Physicians will make no mistake when they specify them on their orders.

**"A RADICAL REMEDY FOR
TUBERCULOSIS."**

The letter printed below was received by a patient of one of our editors, and save for the omission of names and date is a true copy of the original.

Dear sir my Remedy is to Inhale Chloriform allmost every Hour in the day Have you a botol of Chloroform in your Pocket & smell it every Hour until it makes your fingers tingle then stop a while $\frac{1}{2}$ to 1 Hour and then go though withe same again get the best *Chloriform* Give the Patient

| | |
|--------------------|---------|
| R Quinine | 1 ounce |
| Carbonate of Iron | 1 .. |
| Cream of Tarter aa | 1 .. |

M and take a No. 2 capsule 3 times a day also use Dr King New Discovery to controle the cough.

Comment on the above is unnecessary. The treatment is not recommended for general use, however.

Next meeting at Roswell, September 15-16, 1909.

The following extract from the New York State Journal should be read by every physician who has anything to do with the X-ray or with fractures. We believe that this knowledge should be spread among the laity since it is amusing to find the popular notion concerning this agent.

Nine individuals out of ten believe that the X-ray will show anything in the tissues, be it a cannon ball or a broken nerve.

Kathan voices a warning in the following words:

"That there has been much damage done to patients exposed to the X-ray by careless and incompetent operators, there is much evidence to prove. That there is no danger in the hands of a trained operator is equally well established.

That the skin and subcutaneous tissues suffer if exposed too long to these rays, or are brought into too close proximity to the tube, is doubtless true. Too frequent short exposures have the same injurious effect as one long exposure. Nor is it sufficient for the operator to be able to give us a radiograph clear and well defined, but he must be able to interpret correctly the findings thereof.

A radiograph is not a picture of the part exposed, but a shadow thereof. A shadow does not always correctly represent the object which casts it. It may be larger or smaller than the object, depending upon the relative size and distance of object and light. These rays are not parallel, but divergent, so that fractures displaced are exaggerated, and the distance between fragments are likely to appear greater than they really are. Hence the necessity for a trained radiologist is obvious.

In simple fractures a fluoroscope may be sufficient, but it is not so reliable as a plate. The plea that fluoroscope is a

great saver of time is no longer valid, as the plate can be ready for inspection within ten minutes after exposure, and this besides being more reliable, we can study at leisure and is a matter of permanent record."

Next meeting at Roswell, September 15-16, 1909.

A NEW CALENDAR.

We have received from a California enthusiast a scheme for revising the calendar, which is logical, easy and wholly satisfactory. Therefore, we conclude that it will not be adopted. He wants it put into effect January 1, 1911, as it won't be available again for eleven years. The plan is to make a year of 13 months of 28 days each, placing an extra month, "Vincent," between June and July, and to make the last day of the year, the 365th, "Anno Day" or practically a dies non for all ordinary purposes. According to this plan the first day of every month would be Sunday, as would the 8th, 15th and 22d. Every day of the week would fall on a fixed series so that it would be easy to figure out; in fact, to a large extent, it is adopting the nomenclature of the Friends in this respect. On leap years an extra anno day would be inserted between the 14th and 15th Vincent, and also would be a dies non as it would fall between Saturday and Sunday.—Philadelphia Inquirer.

MADE HIM SICK.

"Have you ever been ill on ship-board?"

"Yes, I lost \$100 playing poker in the smoking room yesterday."—The Bohemian.

Next meeting at Roswell, September 15-16, 1909.

BOOKS RECEIVED.

The Ophthalmic Year Book, for 1909.

Transactions of the Florida Medical Association, for 1909.

"Confiscatory Legislation," a pamphlet issued in the interests of the American Proprietary Association, and containing "Confession by Colliers Man," the "Doctors Trust," etc. Also a clipping from the National Druggist for March containing an article entitled "A Leading A. M. A. Official in Disgrace." This article attacks our friend, Dr. Chas. A. L. Reed, of Cincinnati, Chairman Committee on Medical Legislation, A. M. A.

"Manual of Therapeutics," for 1909; issued by Parke, Davis & Company, Detroit, Michigan.

"Public Care and Treatment for the Epileptic," a pamphlet issued by the National Association for the Study of Epilepsy and the Care and Treatment of Epileptics, Sonoma, New York.

"Tuberculosis, A Preventive and Curable Disease," by S. Adolphus Knopf, New York. With 115 Illustrations. 8vo, \$2.00 net. Moffat, Yard & Company, Publishers, New York.

Transactions of the American Proctological Society, Eleventh Annual Meeting, Atlantic City, June 7-8, 1909.

Reprint—The Anatomical Basis for Successful Repair of the Female Pelvic Outlet by Irving S. Haynes, Ph. B., M. D., New York.

Report of the Citizen's Health Committee of San Francisco, relative to the Eradication of the Bubonic Plague.

Report of the Committee on Social Betterment of the President's Homes Commission, including Report of the Committee on Building of Model Houses, by Gen. Geo. M. Sternberg, M. D., LL. D.

Industrial and Personal Hygiene, by Geo. M. Korber, M. D., LL. D.

Report of the Committee on Improvement of Existing Houses and Elimination of Unsanitary and Alley Houses, by William H. Baldwin, Chairman.

Report of Committee on Social Betterment, by Geo. M. Korber, M. D., LL. D.

PLANS TO STEAL COW A THIRD TIME.

Sam Kirk, soon to be released from the Frankfort (Ky.), penitentiary, is serving his second term for having stolen the same cow twice. He announces that as soon as he gets out he will make another try for the cow if it is still living, as he holds it responsible for his two-year sentence. He never did anything wrong except steal that cow.

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Patients*

Rates and Further Information Given on Application

ALBUQUERQUE,

NEW MEXICO

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OF THE

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NEW MEXICO MEDICAL SOCIETY.

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Las Vegas, Bernalillo County, Chaves County, Grant County, Dona County, Luna County, Otero County, Eddy County, Quay County, Torrance County, Colfax County, Santa Fe County.

EDITORIAL

THE MEETING

The meeting was a success. We went to Roswell to learn from each other and to strengthen our profession in the territory by becoming nearer and dearer to each other. Several incidents brought it out that "in unity there is strength."

Roswell treated us nobly. The Elks provided a "grazing and watering place" for the medical Elks, which kindness helped to relieve many from the hardships of the trip.

After the masses had gone to bed, after the mass had sifted down by the survival of the fittest, a conclave was held and some scientific tests were made regarding the vibrations of the ear drums of the natives. They stood

the pressure and we have all reason to assure the world that the citizens of Roswell are a peace-loving community and not easily disturbed after reaching once the post-somnolent stage. Sonorous sonorificity at the soniferous cult of Bacchus seems to increase this condition.

The automobile ride through the shady lanes, along green orchards and fields was a pleasant change for the majority who is used to rocks and sand.

The entertainment at the hospitable house of Dr. and Mrs. Yater made the visitors feel at home.

Our Society is small, but the smallness bring us in closer touch, makes us more friendly and makes friends. We feel more free to discuss topics and our needs in a brotherly way which would be utterly impossible in a large crowd.

I said: "We were at home in Roswell." Sometimes it seemed more a home coming of a large family than the gathering of a cold scientific body. Let us meet in the same spirit again next year.

We have only one occasion to use the hammer, only one incident left an impression which was able to stop the pleasant and pleased expression on the faces of the visitors: the unfairness of the management of the hotel which was headquarters and the need of a vacuum cleaner in some rooms.

We hope Roswell will invite us again.

SCIENTIFIC AND POPULAR
SCARLATINA

What is scarlet fever?—What causes scarlet fever?—Most sage femmes of any little hamlet could tell you more about it than we can ever hope to know;—and we must confess, we know very

little about the etiology of scarlatina. But the day is near,—the dawn has broken already, when scarlet fever, like diphtheria, will have lost its horrors.

Many may smile to have it called a horror. Many may know only the scarlet fever which is good for children to have; which to have mothers expose their children. Just a little vomiting, a sore throat, scaling off and it is all over with. The sooner the better;—the sage femme says so, and she must know.

Different is the scarlet fever with a mortality of fifty per cent and ten per cent of cripples for life time. Weakened for the advance of tuberculosis, deformed and deaf;—Is this not horror?—

It seems that in some parts of the territory the disease had its undisturbed habitat for several years. Calm for a while in some localities the epidemic lightened up to a mortality of fully thirty and one-third per cent.

Some meditation is in order.—This condition is our fault, not the fault of the public. We must wake up, and the sooner we learn the sooner we can teach others.

We have one consolation. In the centers of learning in the East and the Middle West they have the same fight we have. Only the scene is different and the stage personnel is different.

In the darkest of Africa the peaceful sleepy trypanosomata were disturbed by the advance of science, the Sleeping Sickness is a puzzle no more and in our midst our children succumb to a treacherous disease and science so far failed to raise its weapon of defense.

For more than a decade the pathologist has been puzzled about the role of a streptococcus as causative agent of scarlatina. (Aronson, Kober, Moser,

Pirquet, Baginsky, Lauer, etc.). Sera were prepared. They were tried. Opinions differed and differ. The famous experiment of Roger gave us to think. In addition came the work of Stickler and he threw some light upon the chaos by demonstrating beyond doubt that the infective agent, whatever that may be, is to be found in the secretions of the throat.

Yet this contrasted with the popular belief. It seems to be hard even for the medical man to free himself from the maxim "*Vox populi vox Dei*." The popular belief stands firm that there is a connection between the desquamative stage and infection. This belief has taken root and it will be hard to shake it. Yet the ax touches already the root of this superstition; the fall is near and with its fall, which is unavoidable, we will be closer to the truth. Science is based upon logic and we have no reason, nor did we ever have any reason whatsoever to fear the period of desquamation.

The common man sees the skin peel off, this is more before his eyes than the augmented secretion in nose and throat and therefore he lays stress upon what seems to him the most abnormal. He accepted it for granted; all accepted it for granted. It became a popular belief until science applies the only criterion. So it was with the sting of the snake, the poison of the toad, the words of the priests and the bad air of malaria.

Langhurst long ago,—so Girard,—called attention to the danger of infection during the predesquamative stage, but their voices were lost.

Naturally was the eye of science directed first to the exfoliated skin to find there the carrier of infection. There was no reason to doubt the popular belief. It was examined over and over.

Artefacts were seen occasionally and taken for micro-organisms and disappointed, but untired, the student began his work over again to find nothing but dead skin.

Gradually, however, the eye was lifted from the harmless process of desquamation to the real onslaught of the disease, to places of activity in other parts of the body.

This is only logical. Why study the disease anywhere but in its foci of greatest activity when looking for the specific excitant?—We have a parallel in erysipelas.

During all these years the students clung to the logical process of investigation and their work seems to become crowned with success.

Reviewing the situation fully each one of us will ask how is it possible that the majority of us just followed the public opinion and paid no heed to positive factors which ought to have convinced us long ago. It is like with the egg of Columbus.

Everyone is acquainted with the scarlatina without eruption. If the *materia morbi* is dispersed by the exfoliated skin,—how can these cases without erythema have been foci of malignant type?—

During the great Swedish epidemic were found mild cases which communicated the disease. How about the Christiana servant girl with only a sore throat who gave the disease to twenty-four families?

How about the child, six weeks after recovery, which started a new focus in the Charité?—

How about the cases which succumb within twenty-four hours after the very first symptoms show without any trace of eruption? Yet the disease spreads in the same family?

How is it that in families often a

child becomes ill after a first one has been removed to the isolation hospital before the erythema has developed?

How was it that during an epidemic in the garrison of Munich the infection in the majority of cases occurred several days before any of the cases showed any desquamation?

We all were acquainted with these facts, we recognized them silently, and yet we allow the public to live in the belief that the greatest danger of infection is at the time of desquamation.

Why, if the exfoliated skin is the seat of danger, if there rest or develop a specific excitant, has it not been discovered by the many scientists?—Is there any doubt that the same science which found the mycotic fungi in the pinta would find the *materia morbi* in the skin of scarlatina?—Yet nothing was ever found but dead skin and occasional cocci.

From the beginning all research pointed towards a micrococcus, apparently a streptococcus. That it is different from the streptococcus pyogenes was recognized already by Storensen. Yet it seemed similar to the streptococcus of the diphtheritic sore throat and of erysipelas.

Biologic tests were not satisfactory. The work done in Heubner's clinic and by Hektoen was without result.

The reports became so conflicting that the great majority considered the role of this coccus only as secondary.

Class in his valuable article describes it as occurring like the lanceolatus, often in pairs, but also in chains.

Other agents were claimed, so the segmentation bodies which Mallory claimed to have found in the tissues of scarlatina patients.

But we are advancing rapidly in the right direction. The cloud seems to be lifting. Early this year Schleiss-

ner published his results which the writer up to date finds without contradiction. In shortest abstract they are:—

1.—In exposed cases, before the angina developes, there appear upon the tonsils streptococci which on coagulated blood serum give a culture which is nearly pure.

2.—Frequently streptococci can be cultivated from the blood of scarlatina patients without this occurrence having a prognostic value.

3.—The sera of scarlet fever cases after two to five weeks, nearly without exception, give with emulsions of strains from scarlatinal blood complements,—therefore they contain antibodies.

4.—Emulsions of erysipel-cocci and sera of scarlatina never give complements. Such occur in a mild degree with the cocci emulsion of septic origin.

These experiments are not conclusive. Some links are missing. Yet they establish a close relation of a streptococcus-like organism to the etiology of scarlatina and demonstrate also a slight relationship of this organism, of whatever species it may be, with the streptococcus pyogenes.

MINUTES OF THE TWENTY-EIGHTH SESSION NEW MEXICO MEDICAL SOCIETY, TO, ROSWELL, SEPTEMBER 15-16, 1909.

Minutes of the House of Delegates

The House of Delegates was called to order by President Angle, the Secretary, and the following delegates being present:

Bernalillo County Medical Society—Dr. Frank E. Tull, Dr. John W. Colbert, Dr. P. G. Cornish, Dr. W. G. Hope.

Las Vegas Medical Society—Dr. H. M. Smith, Dr. W. R. Tipton.

Grant County Medical Society—Dr. LeRoy S. Peters.

Chaves County Medical Society—Dr. W. T. Joyner, Dr. J. W. Kinsinger.

Eddy County Medical Society—Dr. E. T. Dunaway.

Curry County Medical Society—Dr. A. H. Faith, Dr. S. G. VonAlman.

Otero County Medical Society—No delegate.

Luna County Medical Society—No delegate.

Quay County Medical Society—No delegate.

Torrance County Medical Society—No delegate.

Dona Ana County Medical Society—No delegate.

Colfax County Medical Society—No delegate.

Santa Fe County Medical Society—No delegate.

The credentials of the above delegates were approved.

The minutes of the previous session held at Albuquerque, September 2 and 3, 1908, were then read, and upon motion were approved as read, and printed in the Journal.

The Secretary then submitted his annual report, together with account, which upon motion was referred to Council for action.

Dr. G. W. Harrison, Chairman of the Committee on Public Policy and Legislation, then made a lengthy report, which, together with his account, were referred to Council for action.

Dr. W. T. Joyner, Chairman of the Committee on Arrangements, announced the banquet which was to be held at the Grand Central Hotel Thursday night, an automobile ride

ending at the Country club and other entertainments for the visitors.

Dr. G. W. Harrison gave notice of the following amendments to the Constitution:

1. Amend Article 6 of the Constitution, by striking out the words "ex-officio" after the words "President and Secretary."

2. Amend the By-Laws, Chapter 5, Page 9, by adding the following: In cases of absence from regular meetings of any of the Councilors the House of Delegates shall elect a member of the Society from the respective district and who is present at session to serve until successor is elected. This amendment to take effect beginning with the year 1910.

The House then adjourned until 9 a. m., Thursday morning, September 16.

**Minutes of the House of Delegates, 9 A. M.,
Thursday, September 16, 1909.**

The meeting was called to order by President Angle, all delegates being present, who reported at meeting of Wednesday morning.

The reading of the minutes of previous meeting was called for and same were approved.

It was moved by Dr. G. W. Harrison and supported by Dr. J. W. Kinsinger that Amendment No. 1, relative to election of Councillor be adopted. This motion carried.

It was moved by Dr. H. M. Smith and supported by Dr. G. W. Harrison that Amendment No. 2, relative to voting of President and Secretary at Council meetings, be adopted. This motion carried.

It was moved by Dr. J. W. Colbert and supported by Dr. H. M. Smith that report of the Treasurer be referred to

Council for action. Carried.

Dr. H. B. Kauffmann then gave notice of an amendment to Article 4, Section 2, of the Constitution, which reads "To amend Article 4, Section 2, of the Constitution, by striking out the word 'regular' before the words 'Medical School.'"

Dr. W. T. Joyner then gave notice of an amendment to Article 9, Section 2, of the Constitution, which reads, "Amend Article 9, Section 1, by striking out the word 'three' and inserting the word 'seven.'"

Amend Article 9, Section 2, by striking out all that portion of said section referring to terms of Councilors and inserting the following: "The terms of Councillors shall be for three years. Those first elected serving as follows: Two for one year, two for two years and three for three years, as may be arranged, so that after the first election, two shall be elected annually, for a term of three years and each third election, three shall be elected for a term of three years."

Election of officers then being in order, the House proceeded to name the officers for the ensuing year; as a result the following were elected to serve:

President—Dr. John W. Elder, Albuquerque.

First Vice-President—Dr. F. T. B. Fest, East Las Vegas.

Second Vice-President—Dr. R. L. Bradley, Roswell.

Third Vice-President—Dr. LeRoy S. Peters, Silver City.

Treasurer—Dr. A. H. Faith, Clovis.

Secretary—Dr. G. S. McLandress, Albuquerque (re-elected).

Councillor (for three years)—Dr. W. T. Joyner, Roswell.

Committee on Public Policy and

Legislation—Dr. P. G. Cornish, Albuquerque; Dr. C. M. Yater, Roswell; Dr. G. W. Harrison, Albuquerque.

Committee on Scientific Work—Dr. J. W. Colbert, Albuquerque, Dr. G. S. McLandress, Albuquerque; Dr. F. T. B. Fest, East Las Vegas.

Editor-in-Chief, Journal of the New Mexico Medical Society—Dr. Francis T. B. Fest, East Las Vegas.

Associate Editors—Dr. C. M. Yater, Roswell; Dr. LeRoy S. Peters, Silver City; Dr. J. W. Colbert, Albuquerque.

Delegate to American Medical Association—Dr. G. K. Angle, Silver City.

Alternate Delegate—Dr. J. W. Elder, Albuquerque.

The President appointed Drs. P. G. Cornish, J. W. Colbert and H. B. Kauffmann a Committee on Resolutions, to report later.

It was moved, supported and carried that the sentiments expressed in the President's address be endorsed by the House of Delegates.

It was moved by Dr. W. T. Joyner and supported by Dr. A. H. Faith, that a committee be appointed to draft resolutions expressing the dissatisfaction felt by the New Mexico Medical Society relative to the passage of the recent Medical Act, and that copies of the resolutions be sent to the Secretary of the Board of Health and Medical Examiners, the Governor of the Territory and the Secretary of the Interior. This motion carried and the following were named members of the Committee:

Drs. W. T. Joyner, P. G. Cornish, H. M. Smith, G. W. Harrison, S. S. Von Alman and J. W. Elder.

After much deliberation, Albu-

querque was chosen as the place of next meeting, in the fall of 1910.

It was moved by Dr. G. W. Harrison and supported by Dr. P. G. Cornish that the Committee on Public Policy and Legislation be instructed to exert every effort for the passage of a law allowing dissection of the pauper dead for scientific purposes, the bodies of those used for such purposes to be buried by the dissectors. Carried.

The House then adjourned to meet at 4 P. M., Thursday, September 16.

4 P. M., Thursday, September 16

The meeting was called to order by President Angle. It was moved and supported that the report of the Committee on Resolutions be adopted and spread upon the records of the Society. Carried.

It was moved and supported that the report of the Committee appointed to draft resolutions relative to recent medical act be received and adopted. Carried.

It was moved by Dr. J. W. Kingsinger and supported by Dr. J. W. Colbert that the Editor-in-Chief, and the Secretary of the New Mexico Medical Society each receive \$100 per year for services. Carried.

The following resolution, offered by Dr. G. W. Harrison, was adopted:

Resolved, That it is considered unethical for a physician to visit a patient who has been treated by an osteopath or Xian scientist for the sole purpose of being in time to sign a death certificate.

The House of Delegates of the Twenty-eighth Annual Session of the New Mexico Medical Society then adjourned sine die.

(Signed) G. S. McLandress,
Secretary.

**MINUTES OF THE GENERAL SESSIONS
OF THE**

New Mexico Medical Society, held at Roswell, New Mexico, September 15-16, 1909.

Wednesday Morning, Sept. 15, 1909

The meeting was called to order by President C. K. Angle.

The Rev. Hubert Smith of Roswell then invoked divine guidance, the members standing.

Hon. G. A. Richardson, Mayor of Roswell, was then introduced and on behalf of the city of Roswell welcomed the Society.

An address of welcome on behalf of the Chaves County Medical Society was delivered by Dr. C. M. Yater.

The response to the addresses of welcome was given by Dr. J. W. Elder on behalf of the New Mexico Medical Society.

The President's annual address was then delivered and was entitled, "Some Observations on the Present Phase of Medical Practice in the States." President Angle's address was well received and most favorably commented upon on all sides.

The Society was then entertained by Miss Hazel Mayes, who rendered two splendid violin selections.

The Committee on Arrangements announced an automobile ride for the visiting physicians and ladies at 4 o'clock p. m. and reception at the home of Dr. and Mrs. C. M. Yater at 8 p. m.

It was moved by Dr. G. S. Landress and supported by Dr. J. W. Colbert that we adjourn in honor of Dr. William H. Burr of Gallup. This motion carried and the meeting then ad-

journalled until 1:30 p. m., Thursday, September 15.

Wednesday, 1:30 P. M.

The meeting was called to order by Dr. J. W. Elder, Vice-President of the Society.

The first paper of the scientific program, entitled "The Indigent Consumptive Proposition," was read by Dr. C. M. Mayes of Roswell. Earnest consideration of this subject was shown throughout the paper, and it was discussed by Dr. LeRoy S. Peters of Silver City and Dr. J. W. Laws of Lincoln.

"The Treatment of Typhoid Fever in Private Practice" was the title of the second paper, by Dr. L. H. Pate of Lake Arthur. Dr. Pate's paper was most interesting and was discussed by Dr. Ulysses P. White of Artesia and Dr. P. G. Cornish of Albuquerque.

"Otitis Media" was the subject of a paper by Dr. T. E. Pressley of Roswell. The many points of this subject received the thorough study of a specialist and was discussed by Dr. Frank E. Tull of Albuquerque.

Dr. H. A. Ingalls of Roswell then read an instructive paper, entitled "Ectopic Gestation," which was thoroughly discussed by Dr. R. L. Bradley of Roswell and Dr. P. G. Cornish of Albuquerque.

The time having arrived for outside entertainment, the Society then adjourned to meet Thursday morning, September 16, at 9 o'clock.

Thursday Morning, Sept. 16.

The meeting was called to order, with Vice-President J. W. Elder in the chair.

A well written paper, entitled "Use and Abuse of Surgery," was the first

paper of the morning session, and read by Dr. W. C. Buchley of Roswell. Careful consideration was shown in the preparation of this paper and it was well discussed by many of the members present.

"The Practicing Physician and His Care of the Consumptive" was the title of a splendid paper read by Dr. J. W. Laws of Lincoln. This subject is ever interesting to the practitioners of this Territory and Dr. Laws' paper was thoroughly appreciated. It was given much discussion by the members present.

Dr. A. H. Faith of Clovis then read a paper, entitled "Pelvic Inflammation," which was discussed by Dr. R. L. Bradley of Roswell and Dr. F. T. B. Fest of East Las Vegas.

"Vesical Calculus" was the subject of a surgical paper by Dr. J. W. Colbert of Albuquerque. The author described his operation for the removal of vesical calculus and exhibited some specimens which were very large. The causation of this complaint was given much attention and the paper was discussed by Dr. J. P. Kaster of Topeka and Dr. R. L. Bradley of Roswell.

Dr. F. T. B. Fest of Las Vegas then read a scientific paper, entitled "Improved Microscopic Technique in Relation to Tuberculosis," which was discussed by Dr. Charles F. Montgomery of Roswell and Dr. LeRoy S. Peters of Silver City.

"A Preliminary Report on the Hypodermatic Use of Mercury in the Treatment of Tuberculosis" was the subject of a paper by Dr. LeRoy S. Peters of Silver City, which was discussed by Dr. F. T. B. Fest, Dr. J. W. Laws and Dr. E. C. Thorn.

The meeting then adjourned until 1:30 p. m.

1:30 P. M., Thursday, Sept. 16.

The meeting was called to order by the President, Dr. G. K. Angle.

An able paper, entitled "Eye Strain: Its Diagnosis and Treatment," by Dr. Frank E. Tull of Albuquerque, was the first paper of the afternoon, and was discussed by Dr. T. E. Pressley of Roswell and Dr. J. W. Tinder of Roswell.

"Milk Sickness" was the subject of a paper by Dr. Charles F. Montgomery of Roswell. The subject was well covered by the author, and was thoroughly discussed by Dr. C. M. Yater of Roswell and Dr. G. K. Angle of Silver City.

"Hay Fever" was ably written by Dr. J. W. Tinder of Roswell and discussed by Dr. T. E. Pressley and L. H. Pate.

Dr. Charles F. Beeson of Roswell then presented a paper, entitled "Saline Transfusion in the Treatment of Ilio-Colitis," which was well received by the members and discussed by Dr. C. M. Mayes and Dr. L. H. McCarley of Auburn, Ky.

Dr. J. W. Kinsinger of Roswell then addressed the Society on "The Physical Diagnosis of Tuberculosis," giving valuable conclusions of many years' experience in the practice.

Dr. D. R. Fly of Amarillo, Texas, then addressed the Society on "Unity, Peace and Harmony," every remark of the speaker being enthusiastically received by the members present.

Dr. Fly was made an honorary member of the Society by an unanimous vote.

Following this came the introduction and presentation of the President-Elect, Dr. J. W. Elder of Albuquerque. Elect, Dr. J. W. Elder of Albuquerque.

expressing his thanks for the honor conferred and his determination to make the coming year a successful one.

A vote of thanks was then tendered the retiring President, Dr. G. K. Angle, of Silver City, by the Society, after which the twenty-eighth annual meeting of the New Mexico Medical Society adjourned, sine die.

(Signed) G. S. McLandress,
Secretary.

To the President and Members of the House of Delegates of the New Mexico Medical Society.

Gentlemen: In compliance with the retirements, the Secretary begs leave to submit the following report:

In reviewing the membership list we find that nearly all the County Societies have gained. Up to the date of this meeting the membership of the New Mexico Medical Society stands as follows:

| | |
|-------------------------------------|----|
| Bernalillo County Medical Society | 43 |
| Las Vegas Medical Society | 16 |
| Chaves County Medical Society.. | 17 |
| Quay County Medical Society... 13 | |
| Grant County Medical Society.. | 11 |
| Dona Ana County Medical Society | 9 |
| Luna County Medical Society.... | 6 |
| Otero County Medical Society ... | 11 |
| Eddy County Medical Society... 11 | |
| Torrance County Medical Society | 7 |
| Colfax County Medical Society.. | 9 |
| Santa Fe County Medical Society | 11 |
| Curry County Medical Society.. | 19 |

Less Dr. Yoakam counted in
both Bernalillo 183
and Santa Fe County Societies 1

Outside members 10
182
192

Four new County Societies have been organized during the year past, viz: Torrance county with 7 members, Colfax county with 9 members, Santa Fe county with 11 members and Curry county with 15 members.

The card index has been added to considerably during the year and we have tried to keep this up to date as nearly as possible. On account of numerous removals, your Secretary must appeal to the secretaries of the various County Societies for data along this line and strict attention to changes in membership and removals is not paid in many instances.

It became my duty to report the death of Dr. William H. Burr of Gallup, as having occurred since our last meeting.

The publication of the Journal has proceeded with regularity. Since our last meeting six issues have been printed, September, 1908, January, March, May, July and September, 1909.

Shortly before the first of the year the Council decided to publish the Journal bi-monthly, instead of quarterly, and so far this change has been successful.

The same policy is adhered to in refusing advertising space to manufacturers of quack remedies or to anything not in accord with our principles of ethics.

During the past year 26 original articles appeared in the Journal; 141 pages of reading matter and 67 pages of advertising matter. During the year we have made the Journal a bi-monthly instead of a quarterly, have printed 350 copies instead of 300, have a 36-page book instead of a 32-page, and the Journal is mailed in a neat printed envelope instead of rolled in a wrapper.

I am glad to report that with all these changes I have not been compelled to call upon the Society for a dollar, and that after all accounts are paid will still have from \$75 to \$100 cash on hand.

Respectfully submitted,

(Signed) G. S. McLandress,

Secretary N. M. Medical Society.

RESOLUTIONS.

Whereas, Certain reforms in the Medical Laws of this Territory were and are necessary, and

Whereas, The New Mexico Medical Society has appointed a committee to confer with the proper authorities and point out certain reforms necessary for the public welfare and to bring about such adequate legislation, and

Whereas, Certain of the Territorial Officials and certain members of the Board of Health and Legislature in authority pledged and promised their support for the measures desired and asked for by the New Mexico Medical Society, and

Whereas, At the time of legislature the said certain officials and certain members of the Board of Health and Legislature not only did not comply with such promises given, but helped and recommended legislation contrary to the desires of the New Mexico Medical Society;

Therefore, The New Mexico Medical Society hereby protests against the treatment received and such legislation as passed in 1909.

(Signed) W. T. JOYNER,

Chairman of Committee.

G. W. HARRISON,

Secretary of Committee.

To the Chaves County Medical Society, Roswell, New Mexico.

Gentlemen: On behalf of the New Mexico Medical Society we desire to tender the Chaves County Medical Society our most earnest thanks for the many courtesies and entertainments extended to us during our stay in your city.

(Signed)

J. W. Colbert,
H. B. Kauffmann,
P. G. Cornish.

To the Roswell Commercial Club, Roswell, New Mexico.

Gentlemen: On behalf of the New Mexico Medical Society at its twenty-eighth annual session, we most heartily extend our thanks for your kind hospitality in tendering us the use of your club and other courtesies shown us while in your city.

(Signed)

J. W. Colbert,
H. B. Kauffmann,
P. C. Cornish.

To the Members of the New Mexico Medical Society.

Whereas, It has pleased Almighty God in His infinite wisdom to call from our midst our beloved colleague and fellow member, Dr. William Hungerford Burr of Gallup, New Mexico; be it

Resolved, That in his death our Society has suffered an irreparable loss of an ardent and conscientious worker, and the Territory of New Mexico has lost a valuable and honorable citizen; be it further

Resolved, That these resolutions be spread upon the minutes of the Society

and that a copy be sent to the bereaved wife.

(Signed) J. W. Colbert,
H. B. Kauffmann,
P. G. Cornish,
Committee on Resolutions.

PRESIDENT'S ADDRESS

Some Observations on the Present Phase of Medical Practice.

By Dr. G. K. Angle, Silver City.

I do not believe it will be disputed by any intelligent person, that the truly educated man enters any of the learned professions for the sole purpose of money making, true the educated man needs must have and is justly entitled to an income sufficient to live in harmony with the ambitions which spring from an awakened intellect. If he is to give his best efforts to the public, if he is to be the flower of the American civilization, the ideal physician, there must be no necessity of resolving himself into a committee of one on ways and means to meet the exigencies at the end of every month, there must be a mental equilibrium and poise far removed from the thought of the almighty dollar whether it be from need or greed. The best physicians of today are probably more carefully trained and with greater expense of time and money than any of the other professions and this is as it should be, those who hold the health and happiness of a nation in their keeping can not be too well trained and if we are true to our convictions we have also soon learned how four years of hard work in a medical college but ill prepared us to meet understandingly the intricate problems of disease and the application of the science of medicine

in an intelligent manner. Yes, gentlemen, the physicians assume the grandest of responsibility, they can not be too well educated or too well paid when they perform their duties in an intelligent, conscientious manner, and it is my belief that the people when once assured that the rank and file of the medical profession are able to give the best that the science of medicine affords toward retaining health or palliating disease, they are ready and willing to pay just and reasonable fees to that rank and file of the profession. It oft times looks to me that the situation has come to this that doctors really do charge what their services are worth, and though the people have found that out in despair of getting first class service beyond a reasonable doubt, they unwillingly pay a good fee and eventually drift to the cheap doctor, the result of all of which is to either scale down the ruling fees or to create a general feeling among the public that extortion is being practiced by the profession. If then the assumption be true that the public (and by the public I mean the more intelligent public) are willing to pay good fees, provided they are assured of intelligent service, and I believe they are from my conversation with them, then it is up to us to make good, how then shall the rank and file of the American physicians be raised to this standard? Permit me to offer a few suggestions:

First of all, those young men who contemplate the study of medicine should be willing and voluntary scholars, the desire of knowledge must be a natural instinct born in them and continuing with them during their whole lives, this instinct is oftentimes but feebly shown in the early periods

of many young students, but can be developed and made permanent by a thorough academic education, such as is evidenced by the ordinary academic degrees of our present collegiate courses, and this much evidence of willing scholarship should be exacted of all who contemplate entering the profession of medicine or any of the learned professions, to the end that no commercially inclined aspirant can secure fellowship in a society to which he was never fitted and in which he can only be an impediment to the advance of the science and his end that of the charlatan and the quack.

The standard of the American physician can never be elevated by the multiplication of the so-called boards of the medical examiners as they are now constituted. In most of the states they are wholly the creatures of the state executive who happily in some cases make such appointments according to fitness, seeking advice and accepting such from organized medicine, the state societies, membership in which is a tolerably reliable exponent that the holder thereof is headed toward and is in sympathy with higher and more scholarly ideals in medicine, unfortunately in many instances these emoluments, and it is a fact that these appointments are made purely political same examiners could not make a passing mark in a line of questions similar to those they propound. Has is not gotten to the reductio ad absurdum when graduates of our high class universities must go before boards of this kind to show fitness when this has been attested by the signatures of the medical authorities of the nation. The medical examining board came into existence as a means of defence against the commercial col-

lege which was grinding out all sorts of incompetents. It probably served a good purpose and has been of some temporary service to society, but at its best the idea has ever been an academic curiosity and must ever remain so, its days of usefulness are over, from the way it was created it could not long survive in honesty and never could add anything to the elevation of medicine. On the other hand, it has dragged it down, one sees today a single man styled a quiz master offering to do in a few weeks, aye practically guaranteeing, what four years of substantial work in a standard medical college was liable to fail in, and mores the pity these veneered specimens of the quiz-master are usually the summa cumlaude product of the state Board Medical Clearing House. Is it any wonder that American medicine lacks in productive scholarship and our more enthusiastic students have been forced to go to the continent to the feet of the great masters. Where then is the fault? Granting that some of it is with our political notions and ideas controlling, still much is with ourselves, I care not from how modest a little school some of us may have made our debut into the medical world if we have been the true scholar, that the learned professions exact of all, we can easily see the fault and as well the remedy. None of us should give the least encouragement to any school to an existence, even though it may have been our Alma Mater, unless that school at once shows a desire to get in touch with the spirit of the times, in touch with the spirit of progress, in sympathy with its own intellectual conscience, doing away with all selfish and commercial methods, becoming a corporate part of a great univers-

ity and thereby subjecting itself in all things to the God of Knowledge, turning its back to the worship of the almighty dollar and the enslavement of an unbecoming personal vanity, if it can not do this it should give up its charter and go out of existence, if it will not it must be driven to it by protest on the part of all the profession, even the protest of its own alumni. A half dozen schools east of the Alleghenies, a like number in the Mississippi Valley and perhaps two or three on the Pacific Coast would be ample to guard the public health, and the Monroe Doctrine should apply to the presumption of any increase thereof. The health and happiness of the nation would never suffer at the hands of this type of college, the competency of its graduates to practice medicine as it ought to be practiced, to the good of humanity and honor to the science, must far surpass the present day protégé of quiz-master and state board. Then, gentlemen, let us strike at the root of the evil, let us destroy the commercial medical college, and we have destroyed the commercial physician, the advertising agent of the purely commercial pharmaceutical house, a type of physician more nauseating than the frank and open quack, if such be possible, for the quack, though he be a knave, is not a fool, while this medicated soc. is so gullible as to be persuaded into prescribing all sorts of proprietaries, synthetical preparations possibly, more likely simple colored mixtures, carrying high sounding names always accompanied by a species semi-scientific lot of tom-tom-rot to for-sooth. I may be mistaken, but I can not but believe that it is the low standard of preliminary education along with its parallel, the commercial

medical college, that is responsible for the drug store doctor and the department store doctor of the present day as well as that other type who has headquarters in the saddle who would do all the work in their various spheres of activity at a prevailing fee that would shame a second rate mechanic, he has sized himself up and whatever other qualities he may lack he excels in diagnosis. He has been able to diagnosis himself, and it is this: He has congenial deficiency of gray matter and his center of gravity is a little low down, he does not have time to write prescriptions and soon does not have sufficient intelligence to attempt anything better than memoranda calling for Scott's Emulsion, Gude's Peptomangan, Listerine, Antikamnia, the various Bromos, etc., etc. This sort of physician prepares the soil in which the seeds of patent medicines are sown and thereby robs the profession of millions of dollars which very properly and justly belongs to them. They have never done a scintilla of good in the communities where they have flourished. On the other hand, they have left a trail of ruin, a multitude of human wrecks which a kind public has charged up to the Almighty, but which cold science charges directly to them. oft-times living in the brown stone house on the corner, and, sad to say, sometimes found in the Amen corners of our churches. I am happy to say that only a small percentage of the intelligent profession affect this sort and in many cases it probably comes about in this way:

That some of us who may be really sincere and honest at heart through fear that a fickle public may think us just a bit behind the times, we make use of these modern high sounding

remedies. On the other hand, if we have been guilty, though an undue credulity on our part or a seeming plausibility on the part of the attached literature, if we only stop to think we well know that the multiplication of remedies on the part of the present pharmecudical houses is only to distract and befog the medical mind, only to pay dividends on the stock not for truth or human welfare and the medical profession is only the butt of their ridicule, if you put your ear to the ground you may hear something like this: "What fools these doctors be." Along this line, also, I wish to refer briefly to the present relation of the profession toward life insurance companies. The scheme when honestly conducted is not to be condemned by physicians; on the other hand, perhaps it can be shown to be a philanthropic institution making for the good of society, and, therefore, ought to be encouraged. But in these days of commercialism when men's love for the almighty dollar has blinded them to all decency or reverence for the Golden Rule, a great multitude of insurance schemes, so-called fraternal, semi-fraternal, benevolent, etc., *ad infinitum*, have been created whose only object is by a specious argument of false fraternalism or by special economy in management, etc., they are able to give cheaper insurance and thereby catch the unwary in their net, having never a single thought of fulfilling their contract, but to steal the first premium looking to the lapsing of the policy, or in event of a big pay day to go out of business the day before. This class of insurance companies are the one, two and three dollar per associations which usually by letter or by agent ad-

vice you that you have been selected to act as examiner for them. Now there can be no question that a medical examination ought to be worth five dollars to any company which is in the business honestly, if that examination is honestly and intelligently made, and, furthermore, no intelligent physician is going to make an honest examination for a fee less than five dollars, and these companies know that, therefore, the fact that they still persist in still tending the paltry and insulting fee, is good proof of dishonest intentions towards the public, and the profession cannot afford to be a *particeps criminis* to what in my judgment is one of the most contemptible of modern methods of filching the public. If doctors stop to think I feel sure that there will be mighty few of them who would regret the loss of a few dollars at the end of the year gained from this doubtful source.

If, then, I have pointed out some unfortunate, some vicious conditions in the grandest and noblest of professions, and there is a remedy, let us apply it, put away the idle thought that county medical societies or codes of ethics will ever correct, we must destroy the commercial physician, and to do that we must destroy the breeding places, we must destroy those medical schools everywhere which were born out of the vanity and selfishness of a small and ambitious set of our profession in those undersized cities where there was no proper clinical facilities and no proper teaching force available. We must raise the standard of admission to our medical schools and we must raise the standard of our teaching forces in those schools. Authorities only must be appointed to the professorships to our colleges. Men

who have won their way to public recognition by what they have done for the science and not what the position and the publishing house has done for them. These men must have made good by reason of original investigation, their lives must have been much in the laboratories, their work in the field must necessarily be in the nature of consultation practice only, their salaries must be maximum, not less than \$15,000 annually. We must not hearken to that old time objection to high standards in medical education that under such restricting conditions there would be no doctors to meet the needs of the far outlying districts, etc.

When conditions become so ideal, we will confer a bachelor degree upon our third year student and give him authority to practice under certain conditions and for a limited period of time, a concession which will in no wise lower the standard and which will be of practical advantage to the poorer student in his education. Medical education and the practice thereof must be possible to the poor with brains as well as to the rich with brains and money. There must be no aristocracy in any of the learned professions. You will say that the plan is Utopian, that it is not possible, that it can never be attained, that it is foolishness, but I say, gentlemen, there can be no progress without ideals, ideals in work are the sine quo non to advancement in science as well as in literature and art. Some years ago we adopted an open diplomacy in regard to the practice of medicine and it was the best step we ever took to give truth a boost and quackery a blow, we must continue in this line. Knowledge does not have to slink about in the darkness with covered

head. When we know, we do not have to give a Delphic answer to an honest interrogatory. There may come times of bitter disappointment and the love of money, or perhaps the need of it, may cause us to think kindly of the old methods, the silk hat, the frock coat, a little longer hair, but the world has moved on, and today they realize that Shakespeare told a truth, "All that glitters is not gold." God speed the day when every physician can feel within his breast the throb of an honest heart, know that he is able to give to society out of the fullness of his knowledge.

**A PRELIMINARY REPORT
ON THE
Hypodermic Injection of Mercury in the
Treatment of Tuberculosis.**

Le Roy S. Peters, M. D., Silver City, N. M.

The treatment of tuberculosis by the hypodermic injection of mercury has within the past year created more or less interest, both among the laity and physicians in general; among the laity, perhaps, owing to the wide advertising given the treatment by Associated Press 'dispatches; among physicians, no doubt, by the eagerness of the profession to grasp at any new remedy that offers a possible chance of curing the disease or lessening the ravages of the Great White Plague.

We as physicians are perhaps a little too prone to rush in where angels fear to tread, and yet without this spirit of curiosity the science of therapeutics would forever remain at a standstill, and medicine today would stand where medicine stood in the dark ages.

Still the fallacy of all new methods

of treatment, the use of old or new remedies now for a period of time, then the replaing of these same cure-alls on a corner of the black shelf and the trying of a new specific, all point to the time worn fact that as yet nothing has been found in the drug line that justifies us in announcing a cure or even a remedy that works wonders, so to speak, in the treatment of tuberculosis.

It is true, however, that a few measures aid us in the fight, but, as for knowing of any remedy that even hints at a specific, we are as much in the dark as ever.

It was not so many long years ago that Robert Koch announced to the profession a cure, or what he thought might prove curative, in tuberculin. Then as a body we flew to the new discovery, and—what did we do—killed more unfortunate victims than we cured. As a result tuberculin fell into disrepute until recently, and now again in a far less degree it is being used in suitable cases with apparently good results. I say apparently good results, because no one can say just how many given cases would or would not have attained the same happy outcome had the usual routine treatment, and that only, been followed.

And now what I have said in general applies to the hypodermic injection of mercury as advocated by Surgeon Wright of Fort Lyons, Colorado. With all due respect to the doctor, I feel that he is wildly enthusiastic over the use of this drug and that he has let his enthusiasm blind him in his case reports from time to time. He has let the pendulum swing too far on the high road to recovery, and I believe that sometime in the future it will return with a resounding whack

and shatter all the fondest dreams of those who look for wonderful results by the hypodermic injection of mercury.

You may begin to think I am a knocker. Such, however, is not the case. Far be it from me to knock a method that is still in its swaddling clothes, and further be it still to condemn that method in which none of us, not even Wright himself, has had sufficient experience to warrant him in forming an opinion for or against. On the other hand, I believe in fostering the theory, in bringing it past the infant stage, and proving to our own satisfaction and then to the satisfaction of others the truth or fallacy of the claims made for this particular method of treatment. I hope the method will make good, but before we can safely say that such a Utopia has been reached we must have reports from men in all parts of the world who have experimented under good and bad conditions and whose reports show results equal to those investigators who have worked in more favored climes.

Years ago the self same drug was used in the treatment of tuberculosis, but with apparently no effect, and then was discarded for other sure specifics until recently, when it again claimed the attention of the public, both lay and professional, and has attained the wide advertising mentioned in the beginning of this paper.

Let us ever remember in a consideration of Wright's results that, when all is said and done; when the wheat is separated from the tares, and when the enthusiasm born of a new method of treatment is shorn of its brilliancy, we have left results that bespeak for mercury little, if any, more than for the

old and time worn method—rest, fresh air and good food.

Before going further let us consider Wright's results after a year's use of mercury. I take the following table from one of his papers published in the "Journal American Medical Association," April 17, 1909:

| | Mer- cury treat- ment | Rou- tine treat- ment |
|--------------------|--------------------------------|--------------------------------|
| Cures | 8 | 7 |
| Marked imp. | 43 | 0 |
| Improved | 14 | 2 |
| Slightly imp. | 10 | 7 |
| Stationary | 19 | 19 |
| Failed | 4 | 38 |
| Died | 16 | 11 |
| Total | 161 | 78 |

In those classified as cures, markedly improved, improved, and slightly improved, note how few took only routine treatment, and that nearly all took mercury. Who can say how many in

tionary, failed and died in which by

Bernart in the "New York Medical Journal," June 27, 1908, states that in syphilo-tuberculous patients treated by injections of mercury an improvement in the general condition is seen for a time, but if the treatment is continued a few months will show a gradual aggravation of the tuberculosis.

Thus far from a hasty scanning of the literature I have failed to find results that justify the enthusiasm of Surgeon Wright. In my own cases I realize that I have used the method over far too short a time and on far too few cases to warrant a just opinion. Still if we follow Wright's articles we expect to note favorable results almost at the very beginning and at any rate before the first series of injections have been given.

My report, which I consider only preliminary, covers a series of seven cases under my care at the Sunnyside Sanatorium. The treatment was begun June 1, and the records are carried to the present date.

TABLE OF CASES

| Case | Status | | Temp. | | Hem. | | Blood | | Pres | | Sputum | | Pulse | | Complic | Results |
|------|--------|-----|-------|-------|------|-----|-------|-----|------|------|--------|-----|-------|-------|---------|-------------|
| | Bef | Aft | Bef | Aft | Bef | Aft | Bef | Aft | Bef | Aft | Bef | Aft | Bef | Aft | | |
| I | III | III | 99 2 | 100 4 | 90 | 100 | 136 | 136 | pst. | pst. | 98 | 96 | ----- | ----- | ----- | Station. |
| II | III | III | 99 2 | 99 2 | 100 | 100 | 132 | 132 | pst. | pst. | 96 | 100 | ----- | ----- | ----- | Died |
| III | III | III | 100 8 | 100 0 | 90 | 100 | 120 | 120 | pst. | pst. | 108 | 106 | ----- | ----- | ----- | T. B Intes. |
| IV | III | III | 99 8 | 98 6 | 95 | 100 | 150 | 148 | pst. | pst. | 106 | 74 | ----- | ----- | ----- | Improved |
| V | I | I | 98 6 | 98 6 | 100 | 100 | 145 | 148 | pst. | pst. | 99 | 10 | ----- | ----- | ----- | Improved |
| VI | III | III | 98 6 | 100 3 | 95 | 100 | 140 | 150 | pst. | pst. | 100 | 100 | ----- | ----- | ----- | Failed |
| VII | III | III | 100 6 | 99 2 | 95 | 100 | 110 | 120 | pst. | pst. | 120 | 120 | ----- | ----- | ----- | Syphilis |

far the largest number did not take mercury, who can say how many of these unfortunates would not have attained this unsatisfactory end had they availed themselves of the hypodermic injection of mercury?

these classes would not have attained the same happy results had mercury been omitted? On the other hand, in the remaining cases classified as sta-

From the foregoing table it is safe to say that my results with mercury are not better than with any other method of treatment. However, as I said in the beginning I do not condemn the method from my own experience, but I still feel that were I to multiply these cases by the hundreds the same conclusion would be forthcoming. It would seem that as Wright

says the hemoglobin is increased, and in one case, No. 4, I noted a decrease in pulse rate and temperature with a diminution in cough and expectoration.

It is only fair to say that the patient who died did so as a result of bronchopneumonia following a series of hemorrhages, and the one sent home developed during the treatment tuberculosis of the intestines. Of the three improved cases one was a syphilitic, one in the incipient stage, and the third had been chasing a cure long enough to show signs of improvement anyway. The patient who failed, prior to the use of mercury, was doing well and had been an apparent arrest for five months. After a few injections his temperature went up and activity was noted throughout the upper lobe of the left lung. However, I reduced the dose and continued the treatment with no better results.

In all cases I found that the 1-5 grain dose was too high, in each case a rise of temperature being noted after the injection and in the incipient patient marked soreness of the jaws and gums. I, therefore, used in all injections thereafter 1-10 grain with apparently less ill effects.

And now in closing let me leave these words with you: Until we get a drug, serum, or what not, that shows results in a reasonable period of time let us not be too prone to herald the long looked for specific for tuberculosis.

THE INDIGENT CONSUMPTIVE PROPOSITION.

By C. M. Mayes, Rozwell.

One year ago there met in our nation's capitol, one of the most important meetings of scientific men that ever assembled. They were of the best

brain, both lay and medical. Their purpose to check the gigantic waste of human life, by devising means for the prevention and cure of tuberculosis.

The meeting of the Sixth International Congress on Tuberculosis will go down in medical history as a new epoch, and with other like gatherings will ultimately be the means of saving untold numbers of lives and dollars to every nation.

In the meantime, we of New Mexico, as well as a few other Territories and States have a problem to solve that should interest us locally.

The care of the indigent patient and to save our fair land from being a dumping ground for a certain class of people should be a study of three fold interest. First, humanitarian; second, monetary, and, lastly, for the prevention of the spread and cure of the disease. Or perhaps we might reverse the order of this problem, but all three being so very important that I hope no objection may be had as to which may be most important.

From a viewpoint of humanity or charity, if you like, there is no sadder picture anywhere than the indigent consumptive patient, and the picture becomes many times more sorrowful when they are cast among strangers, especially when the strangers (as we are) are overburdened with this class.

They are sent to us or drift here in all stages of the disease, and only too often without income or friends, and for the most part unable to perform necessary manual labor for their support. They sit about our parks, on our curbs, in our places of amusement and recreation. In the saloon, breathing tobacco smoke and air otherwise contaminated. Friendless, homesick and only too often poorly clad, badly housed, and hungry, or at least without neces-

sary food. It is not an easy matter for one in affluent circumstances bearing the inevitable stamp, to obtain accommodation in this, our land, of boasted western hospitality, and are forced from door to door, and often if housed at all, mayhap in a tent, that boasted abomination of sanitary measures.

I would transgress here long enough to express the opinion that the only recommendation for the tent is its cost; and as ordinarily constructed, heated and ventilated must of necessity cause the death of many that might otherwise live.

They live on from day to day, possibly hoping but too often without even a hope, waiting for the inevitable. A menace to the exposed, and a burden both to themselves and our citizenship. Could anything be sadder?

From a monetary standpoint individually we have very little. We give our services, often grudgingly, and think not of the other even more necessary adjuncts to the life of a being which life is daily being sapped by disease. They must eat, sleep, be housed and buried or transported. We see them day after day a veritable picture of nostalgia. We hear them cough. We probably miss them. They are dead. Each one is human. Their lives are as dear to them as ours to us. Perhaps family, dependents at home. Something should be done.

From a monetary standpoint,—The annual loss from tuberculosis in the state of New York is estimated at \$65,000,000.00. Now, while New Mexico has not the people, nor a climate productive of such a loss, yet like all health resorts, we are a dumping ground and thousands of patients unable to care for themselves are thrown upon our hands every year besides being a menace from a sanitary stand-

point, must be cared for from some source, hence become really wards of municipalities, societies or individuals. Very few cases of tuberculosis originate in New Mexico, but each one is surely by reason of environment and most probably may be traced to those incapable of caring for themselves or being taught the necessary precautions.

Those of us who have had to do with county affairs in caring for the poor know only too well the annual cost in transportation alone, in sending these unfortunates home to die. This being the more economical end of the dilemma.

Many, however, have no one nor any home to which to return and must be cared for, perhaps for years, from the county funds.

Lastly, and probably most important, is the danger of infecting others, and the very difficult problem in treating these poor people.

Very many of them come here with preconceived ideas as to treatment, hygiene, diet and mode of living, and were they capable of being taught are not under the care of a paid adviser, hence are left to drift and spread contagion, and raise up a new race of consumptives.

This is the problem, what the solution?

At the Congress above mentioned, the entire subject was very ably covered in every aspect, however, in our estimation too little was said about the care of the dependent ones. Dr. P. M. Carrington, of Ft. Stanton, N.M., however, read a paper, "Economic Housing of Consumptives With Especial Reference to the Southwest," which should be read by every physician in the land, and should especially be pondered by all Eastern physicians, as he has admonished them against sending

indigent consumptives to our country.

Dr. C. E. Edson of Denver also aptly advises that if "the patient's financial, social or domestic circumstances are such that he cannot in the new climate secure proper and sufficient food, accommodation, care and medical attention, or if his mental attitude is indavisable, he should not be sent away."

Now, what are we to do? For, as time goes on and until we have mastered the disease it is but justice to ourselves, to our fair Southwest, that we look about us, take cognizance of the peril, the inhumanity; and devise some means to check the inflow of these undesirables and to care for those we have among us.

If I am able to start some scheme or be the means of influencing some one who is able to devise means to this end, then this paper has not failed in its purpose. I would offer just a few suggestions for your deliberation, and I hope that this body may be able and willing to take up this work, and our President offer some means to further carry on the work.

I would first suggest that (and I know whereof I speak) a few, if not many, physicians elsewhere habitually treat these people until they are at a low ebb, both physically and financially, then advise them to try a change of climate. Now, is it not possible that we may be able to reach and influence a great majority of the profession elsewhere and advise them of the fact that in sending these people to us they not only burden us, but at least shorten the life, and perhaps end the days of many that under more favorable circumstances at home should actually recover. We have seen at what an enormous expense has the disease been to states with a show of statistics, and

can but realize that New Mexico is, too, bearing a burden, and if we can show to our Legislature and some philanthropist the great need of a sanitarium conducted along economic and charitable lines we may soon be able to care for those unavoidably thrown on our hands. New York has passed laws for her protection. Texas has at least agitated the measure. Hence if it is legal to declare consumption quarantinable, as is Texas fever in cattle, as is Bubonic Plague or Variola in man, why not protect against a disease that pales into nothingness every other calamity under Heaven. Our government spends vast sums annually to rid sheep of scab and cattle of fever and horses of glanders, and it is but reasonable to suppose that if the proper pressure were brought to bear upon the matter that humanity would at least share equally with the lower animals. I would suggest that we see each member of our Legislature and if possible show them the importance of devising means, both for the protection of our commonwealth along these lines and the necessity of establishing a Territorial sanitarium.

We have the means, and history shows that we are not afraid to spend it, and I do not think we could make a better investment than in protecting the lives and health of those unavoidably thrown upon our hands. Physicians elsewhere should be asked to notify their patients that unless they have an income: are not prepared to stand an expense of at least \$15.00 per week indefinitely, that they should remain at home, though that home have no climatic advantages; for climate surely amounts to nothing unless the necessities of life and the comforts of home may be an adjunct.

What may be done for the prevention and spread of a disease and the

cure of our ward and those liable to become burdens upon charity? This is being done in a way, nearly everywhere, but laws and rules to that effect are poorly enforced, and new laws should be evoked. We should have a representative in the cabinet, more representatives in both houses of Congress and in our own body of lawinakers.

A catechism should be introduced in our public schools acquainting every child with the simple rules of prophylaxis, and the teachers should be compelled to show an acquaintance with every detail of prophylaxis as well as a clean bill of health. Our anti-spitting ordinances should be more strict and more thoroughly enforced. There should be in every community a physician whose duty it is to help the officers, and to whom all cases should be reported. He should be a man of ability and should be salaried sufficiently to demand the services of a qualified man. It would seem at first sight that these measures would entail an enormous expense, but when compared with the enormous financial loss brought about by death, disability and the care of indigent consumptives the former sinks into insignificance.

Gentlemen, let us be up and doing and save our reputation as good Samaritans by caring for the needy and smoothing the pathway of the indigent consumptive, a stranger within our gates.

NOTES

The Viability of Certain Micro-Organisms in Sausage.

Signer (*Annali d' Igiene Sperimentale*, Vol XIX, 1909). The author performed a number of experiments upon sausages, prepared in the customary manner, in order to settle the question whether or not pathogenic micro-or-

ganisms may still act as disease producers a long time after the manufacture of the sausages. Pork, veal and rabbit meat were employed for the purpose, the meat being infected with the pathogenic agents either through rabbit-muscle tissue from animals dead from septicæmia or through direct infusion with agar cultures. It results from the examinations that the micro-organisms do not remain viable for a considerable length of time in dried and smoked sausages. Even the anthrax bacillus has lost its viability twenty-two days after the manufacture of the sausage, the spores being destroyed likewise. The pneumococcus is no longer demonstrable at the end of eight days. The glanders bacillus and the staphylococcus pyogenes were found to be no longer viable at the end of two days. A survival of four days was determined in the case of bacillus prodigiosus. It was furthermore ascertained that the streptothrix (Eppinger) and the bacillus of pseudo-tuberculosis can barely survive two days in the sausage. The author points out that the destruction of the micro-organisms in the sausage may be brought about by a variety of factors, such as the presence of common salt and fat, as well as desiccation. The exclusion from air likewise plays an important part in the case of the aerobic germs. Experiments with aerobic micro-organisms are under way to determine the accuracy of this assumption.

Science Healers Scored

A coroner's jury at Worthington, at an inquest held on a woman who died under Christian Science treatment, returned a verdict of death from natural causes. They accompanied it, however, with a rider to the effect that Christian Science treatment in serious cases was to be deprecated, and that

the taking of money in fees by Christian Scientists was decidedly un-Christian conduct.

Heart Massage Awakens Dead.

Forty-five persons who have died recently, form the basis of a most remarkable report on bringing the dead back to life, according to the *Medical Record*. The remaining eight died after a short time. Forty of the cases treated are said to have been due to the anaesthetic administered. The report says that in each instance, immediately after death ensued, or not more than five minutes afterward, the chest was opened and the heart was given a direct application of manual massage.

"After the chest cavity has been opened the hand is forced in and the heart is grasped toward the anterior thoracic walls, and the ventricles are squeezed rhythmically at the normal rate of heart beats. Sometimes fully fifteen minutes elapse before any response is obtained. During all this time assistants should be busy with artificial respiration, saline and adrenalin infusion, tongue traction, intubation or tracheotomy and elevation of pelvis and legs."

How Scarlet Fever is Spread at Exeter.

At Exeter police court on August 27, a widow was summoned for exposing, without previous disinfection, wearing apparel which had been liable to contact with scarlet fever. Evidence showed that the defendant, who had been nursing a child suffering with scarlet fever, went home each day without changing or disinfecting her clothes. There were at her house a boy who was employed at a drapery business, a daughter who took in washing for a public institution, and another daughter employed as a servant, who came home for two hours every day. The bench of magistrates fined the woman 10 shillings and ex-

pressed the hope that it would be a warning to the neighborhood.

There is no remedy, the bugbear of the desquamative stage must fall. Let us educate the public and teach it to avoid from the very beginning of exposure the discharge of air passages, ear and abscesses and to sterilize everything which may have been in contact with such. Then the disease will be restricted greatly until medical science will clear up the last doubt about the causative agent and provide a specific remedy.

In the meantime, must we face the unpleasant duty to arouse the public from the slumber of superstition or popular belief.

The public will become indignant, it will laugh. The auld practitioner,—the old-timer with his empiric formulas,—will sneer,—the wise men of the town will ridicule.—Never mind. They did so about the mosquito and malaria, about the boiled water and asepsis in general.

This is nothing but one of the penalties of advanced knowledge.

ANAPHYLAXIS AND TUBERCULIN.

A new enemy has appeared, anaphylaxis. It is a great mistake to confuse over-susceptibility with anaphylaxis.

Certain individuals may be over-susceptible to the influence of heterogenous proteins, but this is more peculiarity and not the rule. It takes over two weeks after the injection for the formation of the antibody. Therefore before a reaction takes place between the anaphylactic antibody and the antigen we must not speak of anaphylaxis. The process is the splitting of a protein with the formation of toxic bodies (fermentoid-theory).

Pure anaphylaxis cannot be followed

directly by immunity. While an acute anaphylaxis may inhabit and shorten the anti-toxic action of a serum, yet it would be unwise to desist on account of such occurrence from the specific treatment. The passive harm done by omitting the proper treatment excels the harm which might result from the occurrence of slight anaphylactic symptoms.

If the susceptibility of an individual is abnormal, the proper dose must be found, because the attack does not depend upon the introduction or production of a precipitin, but solely upon the quantitative relation between antibody and precipitin or the analogous toxine—antitoxin.

Another source of error may be the pyrogenous action of heterogenous proteins and the splitting up of same other than lytic.

CORRESPONDENCE.

The Albuquerque Tribune wants physicians' cards. It seems they are hard to get, and the Tribune tried to be smart. A fairy-tale was concocted, a poor one, too. So poor was the fairy-tale that anybody could see the Tribune's poor hand. The tale stated that a man looked for a specialist and, because he could find no card in the Tribune, had the worst kind of hardship and experiences. The story winds up by pointing out to the public how criminal it is for the respectable medical man not to advertise.

There is no reason why a physician should not have a card in a respectable paper. The Tribune is respectable enough, but look at the ads. How does a respectable physician's name appear on the same page with the Kodol-Swindle, the Lady-Pinkham Humbug, the Sloan Kidney Fraud, and with the pictures of a fake sanatorium where a

sphygmomanometer is applied over the coat sleeve or the picture of a static machine in connection with the fake of a new discovery.

The daily press may be so hungry or starving that they need the ad of a recognized and exposed fraud for a living; but as long as they promulgate fake statements which allure the public how can they expect the majority of the respectable profession agree to have their name appear amongst such ads.

By associating with charlatanism the physician may be taken for a charlatan and none can afford this. Purge the press from the "Great American Fraud" and that the press will be a fit medium for the respectable practitioner, but not before.

BOOK REVIEW.

"Plaster of Paris and How to Use It." By Martin W. Ware, M. D. Surgery Publishing Company, New York.

"Paraffin in Surgery." By Frank I. Horn, M. D. Surgery Publishing Company, New York.

While the first of the two small volumes is only of value for those who seldom use plaster of paris, but in this case an excellent guide, the second is of great importance. A complete and full history of the prosthetic use of paraffin is given. Of special interest is the description of the fate of the injected mass. While showing what can be done and what has been done, the author is plain in reporting bad results, fatal accident and all possibilities of failure.

The little book deserves a thorough study and ought to find a place on the shelf of every practitioner.

The Ophthalmic Year Book for 1909 covers the subject fully. It is a concise and condensed resumé of reports and

investigations to date, and the authors do themselves much credit in giving to the profession a book that will be appreciated by the general practitioner as well as by the ophthalmologist.

Drs. Tull and Bakes.

NEWS.

At the close of the Roswell meeting, in time for the banquet, a telegram was received which needs no explanation.

"Deming, N. M., Sept. 16.

"Dr. H. K. Angle, President N. M. Medical Assn. Roswell N. M.

"In spirit I am you tonight—Let the toast pass—And drink to the lass—I am sure she is excuse enough for the glass—
Swope."

It spoke for itself. While congratulations were general, serious faces could be observed and many swore they would go and do likewise.

Simultaneously with the Society met the *New Mexico Association for the Prevention and Study of Tuberculosis* and elected the following officers:

President Francis T. B. Fest,

Vice-President J. W. Colbert.

Secretary-Treasurer L. L. Peters.

The N. M. Branch of the Red Cross elected:

President, J. W. Harrison.

Secretary and Treasurer, J. W. Colbert.

"The President of the American Gynecological Society has appointed a committee to report at the next annual meeting in Washington, on the "Present Status of Obstetrical Teaching in Europe and America," and to recommend improvements in the scope and character of the teaching of Obstetrics in America.

The committee consists of the Professors of Obstetrics in Columbia Univers-

ity, University of Pennsylvania, Harvard, Jefferson Medical College, John Hopkins University, Cornell University and the University of Chicago.

Communications from anyone interested in the subject will be gladly received by the chairman of the committee, Dr. B. C. Hirst, 1821 Spruce street, Philadelphia, Pa.

Sincerely yours,

B. C. Hirst.

W. C. T. A.

The good done by any society which tries to improve mankind by elevating the moral standard of the individual must be praised.

If, however, a body of laymen or lay women requests that alcohol be stricken from the pharmacopea they become unreasonable.

How could you buy paragoric for your baby or Mother Sigel's soothing syrup or Peruna, or tincture of jodine, or arnica? Do the ladies forget that perfumes are alcoholic solutions of volatile oils? Do the ladies know that all the nice flavoring extract used for fancy cakes are alcoholic solutions or tinctures?

Strychnin is a deadly poison—is there any reason to strike strychnin from the pharmacopea because murder and suicide has been committed?

"Y."

WARNING.

A family Dienst stopped at a sanatorium near Las Vegas. They were requested to behave or leave. Their trunks had to be held for settlement and then the lady wrote a check "without funds." They went south.

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EDITORIAL.

THE QUESTION OF THE TUBERCLE BACILLUS IN THE CIRCULATION.

TAUSSIG, BREM, DAILY, HEWAT, SUTHERLAND and others could not verify the statements made by ROSENBERGER, which on the other hand are supported by others.

The author from the Canal Zone accuses water used in the process of staining of being the carrier of acid-proof bacteria. He was able to demonstrate these acid-fast organisms in the distilled water furnished by the government. If the U. S. Government serves out such water, we have all reason to believe that something is radically wrong somewhere in the administration and the accusation ought to be followed up by a close investigation and handling the "Big-Stick".

Finding acid-fast organisms in water anywhere does not disprove the presence or absence of TB in the circulation. BREM found something he did not look for, and did not find what he was looking for; that was all.—

DAILY and the others did not blame the water but artefacts and errors. It would take too long to analyse each of these contrary reports, some being even ultra-contradictory because they go as far as doubting the presence of TB in the circulation also in miliary tuberculosis.

Methods may fail. Repeated work on the same individual may be negative. We know that the TB is so varying and notional in its manifestations that it may escape us. It is well known that the ZIEHL-stain is unreliable. Perhaps different results would have been reached if different methods had been used.

We suggest perusal of the articles by MUCH, WIRTH, FUCHS-WOLFER-

ING, LICBERMEISTER, TREUTHOLZ, SPENLER, SCHOTTMUELLER, GEIBEL, AXENFELD, FEST, WEHRLI and KNOLL.

A short survey of the whole situation is necessary to come to an unbiased conclusion.

It was not ROSENBERGER who directed our attention to the occurrence of TB in the circulating blood, this was done before him in 1908 by none less than LIEBERMEISTER of KOLN. To him belongs the honor of overthrowing the accepted belief that TB in the circulation means miliary or disseminated tuberculosis. He claimed, and rightly so, that TB in the bloodstream will not even lead to metastatic processes in other organs. He found the TB in the blood in a few incipient cases, in $33\frac{1}{3}\%$ of the II stage and in fully 60% of the III stage.

Then came ROSENBERGER's report of finding the TB in all cases.

But this is not all. There is the work of STAEUBLI and SCHNITZER. SCHNITZER had about the same result like LIEBERMEISTER; positive in two incipients, in 22% of the II stage and in 52% of the III stage.

It happens that SCHNITZER discredits absolutely the value of the inoculation tests which very tests are strong points or arguments used against the findings of TB in the circulation by HEVAT, SUTHERLAND, TAUSSIG and others.

These arguments lead us to the main phase of the situation. We must distinguish between *tubercular infection* and *tubercular disease*. Furthermore, we must not forget that *experimental tuberculosis is not real tuberculosis*. Only on very rare occasions the manifestations are identical and the modus operandi of the materia morbi is hardly ever the same in the human being like in the inoculated animal. There is a vast difference in swamping the circulation of a small animal with a relatively large quantity of a virulent culture and in injecting some infected blood in which the bacteria are naturally few. We must not forget that the tuberculosis we meet most frequently in our daily routine is the *end-result of a general infection which has localized in the tissues of the lung*. (MEISEN, KRETZ).

Virulent cultures of TB injected into the veins of animals will show circulating TB for thirtyfive days which are not modified until thereafter, when the active processes produce the influences of the antibodies.

Seven days after the inoculation the formation of tubercles with epitheloid cells will begin in the pulmonary tissues, followed by lesions in the mesenterial and bronchial glands, in other organs later, and last in the ovaries. In these organs not before fortyeight days. (WITTGENSTEIN and NEUMANN).

This teaches us that the lung is the organ of predelection for the onslaught of the TB. that the frequency of pulmonary tuberculosis is not due.

as a rule, to aspiration-infection but due to the predisposition of these organs to be infected by the organisms in the vascular channels.

We have no reason not to accept the hematogenous mode of infection.

If this is true, it only follows that, tuberculosis being the consequence of TB in the blood, we must be able to recognize same there and if we fail to do so our method is at fault either because their number is too small or because our technique fails to demonstrate them. The more advanced the disease, the more TB will be recognized. This is verified by the reports of, LIEBERMEISTER, SCHNITZER &c.

That they are not always found, that TAUSSIG, DAILY and others never found them, that ROSENBERGER found them in every case, that FEST and FORSYTH very often found or find the bacilli proves or disproves nothing. It was the same with the pus of the tubercular abscesses; the finding depends frequently upon the reaction of the TB to our method of staining.

We can go further. BEARDSLY claimed to have seen TB often in the urine of tubercular individuals without accompanying lesions of the kidneys. We know that the kidneys are permeable to bacteria in general and it is only natural and logical to suppose or expect to find TB in the urine whenever they appear in the circulation. On the other hand: TB in the urine without evidences of renal lesions and lesions of the lower tractus means that they come from the circulation; there is no other possibility.

To deny the presence of TB in the blood is equivalent to denying the hematogenous origin of the disease. This would be a big step backward. The art of surgery and the science of medicine must cover each other. When one does not fit the other something is radically wrong. Surgical pathology has taught us of late that tuberculosis of the internal genital organs is not of ascending but of hematogenous origin. I refer to BLAU's valuable book with the report of 36 cases of genital tuberculosis and also to the reports of SIMMONDS, AUGUST MARTIN and PROCHOWNIC which all deny the occurrence of ovarian tuberculosis as a primary affection.

We can go further yet. ALBIEN treats in his Dissertation (Giessen) the TB in the placental circulation. He quotes the reports of 20 human and of 93 veterinary cases and adds two more of his own observation. HUGUENIN found TB in the blood of a fetus.

Are all these wrong?—They must be wrong in order that the results and conclusions reached by DAILY, BREM and the others be right. There is only one possibility. *If tuberculosis is of hematogenous origin TB must circulate in the blood.*

We may be unable to demonstrate: the fact remains and the findings of

LIBERMEISTER, SCHNITTER, FORSYTH, FEST, ROSENBERGER and perhaps others merely corroborate a logic deduction, a pathologic necessity which cannot be shaken by negative findings.

FEST.

THE DIPLOCOCCUS IN THE BLOOD.

The excitement over the presence or absence of the tubercle bacillus in the blood stream seems to have blinded the eyes for some facts and discoveries which became apparent while examining the blood systematically. There seems a diplococcus to be more or less constant in the blood of persons afflicted with tuberculosis and the number seems to be in a certain relation to the occurrence of fever and other symptoms of the advanced stages.

We refer to a paper in this issue on the technique of examination of blood and sputum. It is impossible that the diplococci, of whatever species they may be, have been unnoticed; yet the silence on this organism which may be of importance is astonishing.

MARCHISIO called attention to it last year. PANICHI observed it in the circulation but considered it a latent guest. It is time to study this organism closer. It may be the pneumococcus.

Which is the role of the pneumococcus? Of late it was found not to be so harmless after all. Do we not slight an organism which may produce purulent throats, meningeal abscesses, pneumonia, peritonitis, suppurative arthritis?

This organism, often a diplococcus, often a streptococcus, often intracellular, often extracellular, mostly staining with Gram, sometimes with a halo, sometimes with a capsule, sometimes like a rod, sometimes lanceolatus, sometimes coccus, in saliva, in the blood, in the sputum, in the secretion of eye, nose or ear, sometimes with no lesion, sometimes in purulent matter, seems to be everywhere.

It has been found in sore throat and pneumonia, appendicitis and coryza, it has simulated typhoid and has produced epidemics of blepharitis and purulent blisters.

It seems to be harmless mostly but it is fatal quite frequently.

It is coming to the front. It deserves closer attention and no doubt its role as parasitical organism, active or latent, will occupy many interesting chapters.

THE CARRIERS OF SCARLATINA INFECTION.

The editorial of the last issue dwelled quite lengthy on this subject. A glance over the health situation of this territory shows that we simply consider a matter which ought to be a question of cooperation throughout the territory and which causes us to regret that the desire of the ethical part of the medical profession of this territory, which was placed on record last year, namely the creation of a Territorial Health-Office was frustrated by those in power or those behind the power; may be by both.

A letter from Paris by HOUSQUAINS appeared in the INTERSTATE MEDICAL JOURNAL since, from which we quote:—

“Dr. Breesé has reported the following case. A boy nine years old contracted scarlatina. As soon as the diagnosis was made he was isolated in his room, which was entered only by his mother when she returned a blouse which she hung up at the door. Each time she left the room, she washed her hands. The boy during convalescence amused himself by detaching the squamae, the scales which formed in the palms of his hands. One morning, during the absence of his parents, he called his two sisters and at the half open door handed them what he thought was a most interesting object—a piece of skin he had just removed from his hands. Delighted with the gift the two young girls carried it into their room, where it remained for two days until discovered by their mother. But the sisters did not contract scarlatina, though they had played with their brother's “skin” throughout one whole morning.

Are then the squamae of scarlatina not the true vehicle for pathogenic bacilli? Facts and experiences incline us to think that the epidermic scales are really not the seat of the pathogenic microbes, but that their habitat is in the bucco-pharyngeal cavity; and that it is the act of coughing and expectorating through which the infected spread around them the germs of scarlatina. If this be true, would it not be advisable to destroy the germs by disinfecting localities either by the use of formol or corrosive sublimate? M. Comby marshalls against this question the following arguments: In the first place the disinfection, such as it is practical to make, is but slightly efficacious, and its direct action on the microbe is problematic, its most evident action being to ruin the furniture and hangings. Moreover, as regards the eruptive fevers, the pathogenic microbes are but slightly resistant and live only for a relatively short time after quitting the body; on the other

hand, remaining in a virulent state for a long time when they are present in the mucous discharges. Finally, the practice of disinfection presents this danger, that while a certain security against the spread of an infectious disease is effected the real sources of propagation and contamination are neglected. Therefore it is a dangerous error to believe too exclusively in the efficacy of disinfecting localities."

"A family composed of a father, mother and four children, lived in a cottage in the country, one of the children contracted scarlatina and died. The other children were immediately sent to a neighboring village some miles away. Some weeks after, one of the children returned to the cottage. At the end of twenty-four hours, it contracted the disease and succumbed. The cottage was entirely cleaned, the pictures were replaced, the floors scrubbed, the linen and clothes disinfected or destroyed. In about four months, the third child was sent back to the cottage, contracted scarlatina and died. According to M. Comby, whose opinions, are, in fact, most trustworthy, the children in this case were infected by their parents or by the servants, who very probably were the carriers of bacilli and the disseminators of pathogenic germs, despite the fact that they remained immune from the disease. It is evident that if the disinfection of the cottage had not been made, we would be prone to see in this neglect the real cause of the successive deaths."

How many similar cases could not be collected in our cities and villages where our trust is placed entirely in a small quantity of sulfur or some formaldehyde.

Let us be frank. A child is ill, is isolated, desquamates and after four or five weeks is allowed to go to school and expose forty other children. The infection may not become manifest for a whole month, nobody pays attention to the nose and throat of the recovered child which carries the infection. The harmless walls were disinfected, but the dangerous throat was allowed admittance into the school and there the common drinking cup, the end of a leadpencil or anything brought in contact with the recovered child's hands which handled its handkerchief infects one child; perhaps one of hostile disposition to the recovered child; perhaps never playing with it. Nobody thinks of this single case which recovered over a month ago. "WHY GOOD GRACIOUS, HOW RIDICULOUS. THE CHILDREN NEVER EVEN PLAYED TOGETHER!!!"

This is one case of many. — The actors vary, the scenery varies also, but the result is always the same. Some life is sacrificed on the altar of ignor-

ance and we physicians who know, or ought to know, are guilty and we are more guilty if we delay in educating the public.

The A. M. A. starts out in the right direction; the public meetings may prove a blessing for the public and its best friend, the medical practitioner!

FEST.

TRAFFIC IN PHILANTHROPY.---THE CHICAGO PHYSICIAN'S CLUB.--- THE VALMORA RANCH.

Sanatoria are needed. There cannot be too many. Not until every case of tuberculosis is taken care of, either by curing or eliminating it as source of infection, will the *Great White Plague* be a matter of past history. New Mexico by its climatic conditions is nature's own sanatorium and it is logical that the eyes of those who feel the need of eradicating the worst foe of the human race are directed towards New Mexico. People of New Mexico are hospitable. Perhaps no part of the world has to be as charitable by caring for afflicted not their own as the citizens of New Mexico. The problem of the indigent consumptive is of vital importance. Not that we begrudge the indigent the last straw. But, if indigent, this very straw is the identical straw which breaks the camel's back. For the sick, who has not the means to procure physical and mental rest, proper food and proper care, the last straw of going to New Mexico proves a sad failure. The very money spent on the expensive trip would have given the poor man or woman comforts at home which they cannot procure amongst strange people and without funds.

The ethical profession of New Mexico heralds with joy every new institution; because the institution is after all the proper place for the afflicted who needs the most systematic treatment. But we want to go on record that we protest against starting in our midst philanthropic enterprises which are for the personal gain of one or two and cripple the good work which could be done by the same money if it had gone to the cause and not to persons. We hate to see failures.

The Associated Press pronounced lately that the Chicago Physician's Club, at a dinner, has decided to purchase the Valmora Ranch for \$40,000 and start there on about 100,000 acres a gigantic sanatorium. We wish with all our heart such institution would be started. There is plenty room and there are many localities suited for such purpose and the citizens of New

Mexico, who are used to contribute toward the relief of the sufferers, will no doubt join and help to promote so ideal an enterprise.

But, alas! Perhaps it were the paraphernalia of a good dinner, the foams of the sparkling draught of joy from far away Champagne which inspired the optimistic descriptions and statements about the well-known property.

The Valmora Ranch, now not even called so anymore, is a beautiful little spot, a small canyon surrounded by rocky cliffs with sheltered ravines and a little stream running through it.

An old farmhouse of stone and mud-walls was modeled a few years ago into a so-called administration building and about twenty tents erected. In the course of time other mud-brick additions were made. A spring furnishes about sufficient water for the present needs but not more. There is some land which could be farmed; not much however in proportion to the size of the property which is somewhat over nine hundred acres. It is located near the main trunk of a railroad, about six one half miles from one station and two and a half from the other. The roads are so bad, practically a river bed full of stones, that the farther away station is the usual stopping point and even from there the rough bad road is a drawback. But with much money a good road and some bridges could be constructed, with money a water-supply could be created and a sewage system constructed, but it means working in rock; yet money overcomes everything.

There exists some doubt that \$40,000 will do it all. One quarter of this sum ought to buy the place. The ground and buildings have been advertised in the official papers for the foreclosure of a mortgage of \$5,000. All personal property has been deeded to the creditors by the stock company who made a bad failure of the enterprise and it is held now by an administrator appointed by the joint-creditors.

The place was in the market for quite a while. An attempt was made to unload it unto a fraternal organization for a high sum, the offer was cut down to \$25,000 and refused. It seems the value has increased again.

It is a lovely spot, the climate is ideal, what water there is, is good and it is highly suited for a small institution, which charges enough to be able to buy most of vegetables, feed and fodder. It may be ideal also for a large philanthropic institution, but we fail to see why it would be wise to grind rocks to make farm land, bore for water, cut sewers out of rocks and build a good

road in order to be selfsupporting; the same money will buy more good land with better facilities.

We of New Mexico like to learn.

ORIGINAL ARTICLES.

IMPROVED METHODS FOR THE EXAMINATION OF SPUTUM AND BLOOD IN RELATION TO TUBERCULOSIS.

BY FRANCIS T. B. FEST, M. D., of Las Vegas, N. M.
National Pythian Sanatorium.

Clinical and laboratory findings must cover each other in order to make a diagnosis scientifically correct. Yet this often seems to be impossible, especially so in tuberculosis, where in the incipient case the clinical finding may be negative, while in the advanced case the laboratory finding may seem negative. I say "seem" because the fault is with us and the time will come when our present fallacious methods will belong to the past.

I shall not refer in this paper to the specific methods of diagnosis, but limit myself to microscopic means only.

The belief existed for some time that the Ziehl-carbol-fuchsin stain is ideal. Yet many a case was neglected and treated for anything else but tuberculosis on account of a negative Ziehl. We were aware that in the pus of abscesses the tuberculosis bacilli were not found, yet the tubercular origin could not be doubted. At the same time, this knowledge was not applied properly to the secretions and pus from the lungs. The clinical picture often showed a rapidly progressing pulmonary tuberculosis, yet the sputum seemed to be free from TB. While the Ziehl stain is adequate for ordinary routine work and as a first step to diagnosis, yet beyond this it is of no value.

To prove this I must go back to the natural history of the so-called bacillus tuberculosis. It is a member of the group actinomyces and belongs to the genus mycobacterium. This genus has the peculiarity of being more or less acid-proof, which peculiarity is most marked in the most important species of the genus, the mycobacterium tuberculosis Kochii.

This peculiarity of being acid-proof is confined to an envelope, a chlamys, which is no vital part of the microorganism itself and the existence of which depends upon age and surroundings. Young colonies and pus seem not to fa-

vor the formation of this envelope, which is stained best by carbol-fuchsin and fixed with picric acid. By this fixation the TB often can be distinguished when the fuchsin alone will be negative.

This envelope seems to consist of fatty acids and is of a cerous nature. It is more like beeswax than any other known substance because the digestive organs of the galleria melonella have the faculty of dissolving it entirely without killing the germ.

Treated with various solvents, the acid-resistance is diminished and various bodies can be extracted, namely: fatty acids (palmitic and arachidic), acid esters of higher alcohols (palmitic and stearic) and the acid esters of ceryl and myricyl alcohols.

The composition changes according to external conditions. I refer to the work of the older Klebs, and this change of its acid-resistance can be produced artificially (*Fontes, Zenner*). The envelope, when present stains always with fuchsin and picric acid and b-tolin. Sometimes I have been able to make nice stains with chinaphtalon. Occasionally one can detect the envelope more or less when using soudan iii., indulin 6b, fat-green, gallocyamin and even dimethylaminazobenzol.

This waxy substance is more or less the same in its complex nature in all mycobacteria and has been extracted and used therapeutically by Deyke under the name nastin. The virulence of the TB is not impaired by the absence of the envelope, while its substance has for itself a specific toxic action.

The TB belongs to the class of organism in whose true bacterial body, the mycoprotein, when treated with iodine and a rosanilin-derivate, forms a combination therewith and accepts the so-called Gram stain. While the fact that the TB stains with Gram is old, the recognition of its great importance is relatively new and is mostly an achievement of *Much*, who used it to demonstrate the granulations of the bacterial body of the TB. It is true that the TB is not the only organism which accepts the Gram-stain, most sporulating bacilli do and also the pneumococcus, and others, but there is such a vast difference in their morphologic appearance that a mistake is hardly possible to the trained eye.

A proper preparation of the sputum is of great service. Many aids have been suggested and one of the most valuable is the treatment of the sputum with hydrocarbon (naphtha, benzol, ligroin). The TB, on account of its waxy envelope, will adhere to the hydrocarbon and after shaking the mix-

ture well and allowing to settle, it will be found that the TB have collected just in the separation line between the sputum and the hydrocarbon (Halle and Nitsche.)

Of greater value is the method of Xylander and Uhlenhuth, which promises to become general. Many, like Seeman, Meyer, etc., have adopted it. The sputum or pus is mixed with antiformin, which is a mixture of liquor sodii chloratae and sodium hydrate. This brings about a liquefaction of every organism except the TB. All TB will be found in the flocculent masses, which deposits on the sides and the bottom of the glass or a quick sediment can be obtained by centrifugation. In this manner a sputum which has only a very limited number of TB can be examined without the tedious and often resultless process usually employed.

Haserodt combined the use of the hydrocarbon with the use of the chlor-alkali solution.

We have adopted at our institution a routine which so far has been very satisfactory. Whenever time allows we triturate the sputum according to the method of Xylander, using enough of the chlor-alkali solution to delute to about 20 per cent. But when time is pressing we take one loop of sputum or pus, one loop of the chlor-alkali solution and three loops of water and rub the mixture fine. After thorough drying the film is fixed with as little heat as possible. The slightest overheating will spoil the film, and for this very reason and to obtain a good fixation at the same time, I have modified the customary technique inasmuch as during the whole process of staining no water is allowed to touch the film.

After this careful fixation we apply my modification of the stain which is a five per cent. alcoholic solution of crystal violet to which five drops phenylamin have been added and the solution filtered. It will be serviceable only for a few days and must be prepared fresh to obtain the best results. The stain is applied hot, and acts for three minutes. The surplus is poured off and an alcoholic iodine solution (2 per cent.) is applied in this manner that the film is immersed face down. This is done to have all precipitation removed from the preparation. The iodine must act for five minutes. The next step is immersion in alcohol, face down, decolorization in nitric acid alcohol (30 per cent.), washing in acetone-alcohol, clearing in xylene-phenylamin and, after drying, mounting in the usual manner. All these steps are done with the film face down. Should there be a thick film, the action of the iodine is repeated.

If any contrast is desired the customary tinctions can be used.

This process is not easy at all and it is a satisfaction to know that in the laboratory where the modified Gram originated mishaps are frequent. Here, more so than with any other stain, accuracy, patience and perseverance are necessary.

The controversy between Spengler, Fuchs-Wolfing, etc., on one side and Much, Behring, Wirths, etc., on the other, about the nature of granula and splitter, ought to be nearing an end. Spengler deserves undoubtedly great merit in furnishing us the picric-stain and by describing fully the splitter and calling attention to their importance, notwithstanding the fact that Koch observed the splitter before him. To Much belongs the credit of having called attention to the granulations and showing us the way to a better knowledge of the morphology of the TB. Fuchs-Wolfing and others claim that the splitter and granula are identical. While this is not quite correct in one sense, yet there exists the same relation as between the rods stained red and the granula-chains stained with Gram. In one case the envelope is stained and in the other the bacterial bodies.

It is known that the TB, when stained in the usual manner, presents a difference in the density of color, sometimes like vacuoles and sometimes like spores. Weigert's stain will show spores. They were considered by some to be Babes metachromic and Ernst sporogenic bodies, others (Betegh) call them true spores. They are evolution forms of the TB. The TB multiplies, as a rule, by transverse fission; in cultures apparently also otherwise producing the dichotomous branching. This fission occurs within the envelope and therefore the granula can be compared with chlamydospores within a chlamydobacterium. The splitters are nothing but divisions of fragments of the rods which have retained an irregular shape on account of the waxy nature of the chlamys.

I have made experiments which are conclusive and invite corroboration of others by repeating same. Stain a sputum, which is known to be rich in good rods, with gentian-violet-anilin-water; make sure of producing an intense coloration and register the rods with the mechanical stage. Remove the oil with xylene-alcohol and apply Gram.

The very rods which appeared purple first will now show mostly as granula-chains, some may appear bipolar and many independent granula will be seen.

We can go further. Stain with the picric acid fixation, register the lo-

cation, remove the oil and apply Gram. Now the former splitter, not entirely decolorized, will show as granula of various size.

What Deycke said about the rods is true about the splitter, the Gram will show the bodies of which the fuchsin showed the envelope.

What we learned in regard to sputum and pus can be applied to the blood. Only a few years ago no less authority than the great diagnostician, Sahli, claimed that TB are found only in the blood in acute miliary tuberculosis, and there in small numbers. Cornet held a similar view, which was the opinion of the day. Rosenberger claimed early this year that he found TB in the blood of every case of tuberculosis, even in the very incipient. Forsyth was not able to find them in all cases, and we had about the same result. This simply means that there were so few that they were not brought within the field of the microscope. It stands to reason that a very limited number may escape the most careful searcher.

One ground of recent experiments, Neumann and Wittgenstein, it stands also to reason that TB may be in the circulation and not produce any symptoms at all, and not produce any lesion beyond the local in the pulmonary tissue and produce new lesions there. It has been demonstrated that the pulmonary tissue differs from all other organic tissues by its having a predilection for tubercular infection and that therein the TB can retain its virulence for a long time. I refer to the old buccal experiments of Malet-Codeat, Falk, Schottelius and the new work by Neumann and Wittgenstein.

There is no reason unless the local focus be encapsulated hermetically, why some TB should not enter into the circulation all the time in every active case where they either become attenuated, destroyed by phagocytotic processes, or, not so frequently, lead to new infections but producing all the time antibodies which in return assist in their own destruction.

Here I must refer to the report of Hugenuin, who found numerous TB in the arterial circulation of a six month fetus, from a mother in advanced phthisis, but neither placenta nor any fatal organ showed microscopically or macroscopically any sign of tubercular lesion.

Systematic examinations of blood lead us to the discovery that the number of various microorganisms in the circulation is astonishing. To avoid errors it is always best to use the Gram stain. This is customary with us and led to the additional discovery that the pneumococcus-like organism is the most frequent and its number seems to be in relation to the febrile condition of the host. Therefore, for an exact diagnosis, a careful study of

the blood will be necessary in each case; the mixed infection needs more careful investigation, and such investigation may lead to the unexpected deduction that the TB is less destructive than its mate and the prospect seems brighter again that this mate is less resistant to active therapeutics than the tenacious TB.

The pneumococcus is recognized by its retaining the Gram stain and its peculiar morphologic character. Ordinarily it may be mistaken for the micrococcus catarrhalis, but this does not stain with Gram. Wirths, and especially Webb, in his excellent article in Kleb's new book, laid more stress than others upon the import of the mixed infection caused by the pneumococcus or a similar organism. They, however, viewed same only from its relation in the sputum to the opsonic index. I consider its significance by its number in the circulation. There is no desire on my part to lower the importance of studying the opsonic index in every case where a specific therapy may be indicated. I call attention to the information which may be gained by a close study of the blood along these lines. The bacteria can be counted and this gives us the possibility of an index of the severity of the infection.

We are using in this institution a technic which is rather primitive yet and open to much improvement. Some result can be obtained by the use of the ordinary counting cells and a good one eighth immersion objective; but only a well trained microscopist will derive any satisfaction. We are experimenting with modifying the cells in a manner which may permit the use of higher powers by approximating the ruling to the objective.

I have worked out a technic, which, while somewhat complicated, is fairly accurate and serves our purpose well. A melangeur, as used ordinarily for the leucocyte count with the Thoma-Zeiss hematocytometer or its modifications, is filled with blood to the 0.5 mark, followed by a citrate dilution to 11. Of this blood-dilution one millimeter is measured with either an accurate hematocrit scale or a fine pipette which I marked especially. The melangeur of the antiquated Gower instrument is sufficiently fine. This millimeter of dilution is distributed on a warm slide in the manner that a row of finest touch films are made. As a rule one millimeter will make about eight. The smaller these films, the more easy the counting will be. The films are allowed to dry and fixed with a three per cent. acetic acid alcohol. Heat must be avoided. The staining is done with borax blue.

Several slides are prepared in this manner, the more slides counted, the more accurate the result will be.

Each of these films is thoroughly searched and the organisms counted, which will be relatively easy if pains are taken to make the films small.

The sum of the organisms of all films counted is divided by the number of slides used and multiplied by twenty. The result is the number of organisms in one millimeter blood.

The beginner does well to make the dilution with an accurately graduated tuberculin syringe, this will give an ample supply to insure a series of suitable slides.

A great objection against my method may be that the borax-blue stain allows no differentiation. This objection is overcome by the fact that a differentiation can be made before the count by any suitable method and the educated eye will recognize the proper variety in the counts/slides. A certain amount of experience with microscopic technique is necessary and without it no such work should be attempted.

Primitive and crude, as my method may be, it is a step forward because it would be unwise to attempt even to judge the number of bacteria in the circulation by adopting a careless, unscientific and deceiving method like the one in vogue with the examination of sputa, which deceives the patient and his physician by accepting a standard of "a few," "many" or "very many" in one field, which field must vary with each preparation and with the individual who makes the same.

I again call attention to the value of a proper recognition of the pneumococcus. The proteolytic power of the TB is normally less than that of the pneumococcus. The pneumococcus has also a marked hemolytic action; I refer to the green-color-play in the hemoglobin cultures. On the other hand is the attenuation of the pneumococcus more easy and the tenacious virulence of the TB well known. Some claim that the two organisms are to a certain extent antagonistic. This is an error. There exists no enantobiosis between the two; on the contrary, a symbiosis seems to be established. Therefore every improvement in the methods of recognition of these organisms and the creating of indices for same, which will be alike with each worker, is a step forward, no matter how trifling.

Small drops make the mighty ocean.

I must give proper credit and thanks to my assistant, Dr. H. J. Hoag, whose conscientious collaboration made this work possible.

Read at the Meeting of the N. M. Medical Society.

(Published in the Interstate Medical Journal).

THE PRACTICING PHYSICIAN AND HIS CARE OF THE CONSUMPTIVE.

BY

DR. J. W. LAWS, LINCOLN, N. M.

Consumptives are coming to every town and locality of the west by the score. Only a small proportion of the number who come have the inclination or the means to enter a Sanatorium, where they can have the instruction and have drilled into them from day to day the elementary principles of the prevention and the cure of tuberculosis. Hence there devolves upon the practicing physician a duty, and a responsibility to the community in which he lives; a duty to the sufferer from tuberculosis; and a responsibility to the sufferer relatives for whom the physician acts as guardian.

Before entering into this subject, I think that an apology is due this intelligent body of medical men for the reiteration of some of the precautionary measures necessary to guard against infection and also for the enumeration of some of the elementary principles of "taking the cure." Physicians of the West are at a disadvantage in that many consumptives are sent to New Mexico, Colorado, and Arizona with the belief that "climate" will do everything, and often with the instruction to stay away from doctors and medicine. Many of us have seen such patients, by their indiscretions, do themselves irreparable damage before we ever had an opportunity of suffering a staying hand. It often happens however that such a heath-seeker will ultimately come into our office with the remark: "Doctor I thought I would drop into your office and have you examine me and tell me what you think of my condition." Such a patient expects to be told whether one or both lungs are involved, and to what extent cavity formation has taken place and what are the chances of ultimate recovery. Now, what such a patient needs is not so much a knowledge of the morbid anatomy of his lungs, but such a patient does need a thorough investigation of his subjective symptoms, his mode of life, and the surroundings under which he lives. It is the

duty of the physician who thus has an opportunity of acting as judge and counselor to take such a patient firmly into account and impress upon him the necessity of adhering to well established principles of the prevention and cure of tuberculosis. When it is possible, such a patient should be impressed with the fact that it is far better for every consumptive to be under the guidance and control of some physician rather than to trust to his own feelings as to what is best for him.

When such a patient consents to continuous medical supervision it is then the physicians duty to see to it that each patient 1st. adopt such precautionary measures as are necessary to prevent reinfection of himself and infection of those with whom he may be associated. 2nd. that the patient take the maximum amount of nourishment that it is possible to assimilate, 3rd. that the patient take either the rest cure or graduated exercise as the physician shall explicitly direct, 4th, that the patient take exercise only of such kind and amount as permitted by the physician, 5th, that the patient be instructed in all points bearing upon his subjective symptoms, and their relation to the care consumptives should take of themselves when such subjected symptoms obtain.

For a physician to give a consumptive the close supervision and institute the strict discipline necessary for the management of a case of tuberculosis, means that he must be free to make calls as often as necessary to keep track of the subjective symptoms, to institute such dietetic and hygienic measures as seem necessary, and give such symptomatic treatment and encouragement as may be indicated. From my experience I am inclined to think that the most satisfactory way both for the patient and the doctor is to charge so much per month for such medical supervision and so be free to give the patient the personal oversight necessary. The financial condition of most patients that I have had to treat at their homes or boarding places has been such that a charge of \$15.00 per month has been all they could afford, but of course this charge can be regulated in accordance with the patient means for paying.

The physician is responsible to the community in which he lives in seeing to it that the consumptive he treats takes all the precautionary measures to prevent infection, and wherever possible to encourage and educate the public to demand that such measures be adopted and followed. My excuse for presenting this sanitary hand spit cup, this pocket cup, for street

use, and this paper handkerchief or napkin, with which all of you are no doubt so familiar, is that I have patients come to me, not only from the towns of East but who have been treated by the leading physicians of the towns of the West, who have never used such cups or napkins and say that they did not know where such conveniences could be obtained. The container of the hand cup shown costs 15c and the fillers cost 1c each, while the paper handkerchiefs or napkins can be purchased as low as 80c per 1000. A physician should be willing where such supplies can not be obtained from the local druggist to order from the factory for his consumptive patients, letting them have them at cost. A consumptive once accustomed to the use of a spit cup, feels like a criminal without using one, and is of untold value in educating the public to the safety of association with the careful consumptive and to the danger from the careless one. People of the towns of the West are sorely in need of being educated as to the feelings and rights of the careful consumptive, and as to the demands that they should make of the careless and oversensitive consumptive. Consumptives themselves prefer to use all the precautionary measures possible but public sentiment as shown by the attitude of boarding houses and rooming places, drives the consumptive to such subterfuge as "throat trouble," "Weak lungs," "Asthma," "Bronchitis" etc. The following story from *Outdoor Life* very well illustrates the attitude of the ordinary boarding house. In one of the well known health resorts where hundreds of people with tuberculosis spend their winter, the idlers friend noted with alarm and disgust that the boarders of certain boarding house spit from the porch upon the grass of the lawn. He called the landlords attention to the state of affairs and this was the answer he received: "Oh, that's all right; them fellers won't do no harm. Its these fellers what has to spit in cups, that I am afraid on." So not only have we the consumptives to educate but it develops into a sociological problem of educating and obtaining the cooperation of the public. The use of rags and news-paper to receive expectoration is a poor make-shift. The rags contaminate the hands and the clothing, while flies will bedraggle themselves in the sputum upon a news paper one minute and the next infect the food of some innocent child, and a slight puff of wind carries the news paper flapping over the floor, bedding, and furniture leaving a trail of contamination. The

use of the paper handkerchief or napkin to be held in front of the mouth by the patient when coughing to prevent the spraying out of droplets containing the bacilli, is one of the precautionary measures that needs little more comment than to mention. The careful conscientious, cleanly consumptive has my respect and sympathy. Such a consumptive, although not a menace to the health of those with whom he may associate, is often shunned and made to feel his affliction; because public sentiment has not been educated to the point of accepting the careful consumptive and of condemning the criminally careless one who masquerades under the name of some other disease.

As I have indicated above, the duty of the physician to the sufferer from tuberculosis is something more than a careful examination and office advice when such patients see fit to come to the office; but personal supervision and discipline, instruction and gradual education as to what his symptoms indicate and how he shall live while such symptoms last. I find that rules for the instruction and guidance of patients to be of great assistance, and with few exceptions, depending upon on the individual case in hand, I would not attempt to improve upon rules gotten out by Dr. Lawrason Brown, or "Helps and Hints to Tuberculous Patients" by Dr. Minor. A typewritten copy of these rules place in the hands of the consumptive patient are of inestimable value in guiding and controlling such a patient.

In handling a case of tuberculosis I know of no one thing that may bring to the patient more disastrous results than injudicious exercise and for that reason I can not refrain from briefly considering a few rules under that head.

Exercise.

1st. "Never to the point of fatigue. Always stop before you are tired, and dont walk upon your nerves.

Again Rule. "None if your temperature of the afternoon of the day before was over 99.5 degrees." This rule while good, I have found that exceptions can now and then be made. Every day in this Western country consumptives are, however, regardless of their fever, cough, pulse or other subjective symptoms, going the very limit in the way of exercise, believing that

they are doing the proper thing when in reality they are doing themselves irreparable damage.

Another rule. "None if uncomfortably short of breath the pulse is keeping above 100."

Another for an hour.

Rule. "None after meals."

Another. "No hill climbing without orders."

Rule. "No driving or horse-back riding, without permission." Walks come first. Such rules as these sound very simple and unimportant but a great deal depends upon controlling consumptives, and the majority are as indiscreet as to health rules as so many children. The majority of patients and some physicians do not realize the importance of absolute rest, even when the subjective symptoms of tuberculosis are comparatively mild.

The Rest Cure.

Rule. "Rest comes before exercise and the latter is only good after the former has built up the system sufficiently, so that you have a surplus to draw from above and beyond the ordinary demands of the body."

Another rule. "Rest in a reclining chair if a temperature is over 99.5 degrees."

Another rule 3. "Stay recumbent on a cot outdoors if temperature is over 100.5.

Another rule. "Go to bed in a room with windows wide open if your temperature is over 101.5 degrees, and let the doctor know at once.

As to food and eating, again we see almost daily the newly arrived health-seeker going to the cheap house or restaurant, evidently expecting "climate" to work wonders and with no adequate idea of the meaning of forced feeding. Let us consider a few rules under that head.

Food and Eating.

"If digestion is good, a generous mixed diet (favoring especially red meats, eggs, milk and fat) with raw eggs and a glass of milk at 10 and 3. If awake in the night and can not sleep again, or if awake an hour before breakfast in the morning take a glass of milk.

Another Rule. "In twenty four hours try to eat in addition to the regular meals eight raw eggs and four glasses of milk, but if it overtaxes your stomach let the doctor know at once."

The majority of patients will say that they can not take raw eggs but all they need is to have some one show them how easily a raw egg, first put in a glass without breaking the yelk, then on this a few drops of lemon juice or grape juice, can be swallowed with one gulp, some-what like an oyster. I have often had to be insistent upon the patient trying such a simple procedure and have often had to go so far as to set the example by swallowing a couple in such a way. There are many other rules of value laid down by Dr. Brown and Dr. Minor that can not be here considered, but enough are enumerated to show that a consumptive is far better off under the guidance of a physician who follows such a line of supervision of his patients, than is the one who trust to an occasional office call and rests in the false security of some new preparation of limited curative and nutritive value. So far we have no specific cure for tuberculosis and until we do have, to build up the nutrition of the patient, raising the body forces to the highest possible standard, and then to conserve the vital force thus stored up over a sufficiently long period until quiescence and healing of the active lesion takes place, is the sheet-anchor to which we should all faithfully hold.

In conclusion my plea is that we as physicians of the West, give to the consumptive under our care, who either do not have the means or do not care to enter a Sanatorium, the same rational home treatment that is being adopted and followed with such satisfactory results by our Eastern brother, who labors under far less favorable climatic conditions than with which we are blessed.

EYE STRAIN; ITS DIAGNOSIS AND TREATMENT.

BY FRANK E. TULL, M. D. ALBUQUERQUE.

Read at the Meeting of the N. M. Medical Society, September 1909.

Refractive errors, muscular imbalance, and retinal irritation being the cause of "eye stain" and the most frequent and annoying condition seen by

the general practioner as well as the ophthalmologist, I have selected this subject, not with the thought of presenting any thing new or unusual but for the purpose of reviewing the subject and bringing out points as regards diagnosis, that are often obscure and *overlooked*.

An emmetropic or normal eye is one which has reached that stage of development where parallel rays of light are focused on the retina without any effort of accomodation and is the ophthalmologist's ideal unit of measurement in refraction.

An eye which is not normal, or an ammetropic eye is one which in a state of rest, does not form a distinct image of distant objects on its retina without accomodation, and it is for the ammetropic eye this paper is especially *prepared*.

As the subject covers so much ground, it is necessary to confine ourselves more especially to what we consider the most important symptoms and treatment of the subject in hand.

Asthenopia, or so called "eye strain" is separated into three general divisions; refractive errors, muscular imbalance, and retinal irritation from light, named in order of their frequency.

Under refractive errors are found hyperopia, myopia, and the various forms of astigmatism found alone and in combination as compound hyperopic astigmatism, compound myopic astigmatism and mixed astigmatism.

Under muscular imbalance we will take under consideration only two conditions, exophoria and hyperphoria as they are the most frequent cause of nervous disturbance under this division.

Retinal asthenopia or sensitiveness of the retina to light is the least frequent cause of "eye strain," but is not infrequently observed in New Mexico, Arizona and other arid districts where reflected sunlight is not impeded.

With hyperopia, myopia and the various forms of astigmatism, the ophthalmologist is not called upon as frequently to correct poor vision as to relieve the patient of unpleasant or distressing symptoms, either local or remote. Headache is the most common subjective symptom that cause the patient to seek relief, and is usually frontal and denominated "brow ache,"

or may be fronto-temporal. The pain or discomfort, starting in or back of the eyes, may extend to the occiput or all over the head and be accompanied by all kinds of nervous manifestations. Its most distinguishing feature is that it comes on while using the eyes, and gradually grows worse as the use of the eye is persisted in, and likewise gradually ceases after giving the eye a period of rest, except, where there exists a cramp of the ciliary muscle. The ciliary muscle being the prime factor in the cause of headaches, Thornton feels justified in calling it the "headache muscle." Sick headaches are largely due to "eye strain."

According to some few observers various functional disorders such as dyspepsia, billousness, chorea, epileptoid diseases, hysteria, melancholia, etc. are attributed to "eye strain," and while we do not feel justified in making the same statement, many functional disorders are modified or relieved by the proper correction of refractive errors. The common objective symptoms of "eye strain" are blepharitis marginalis, styes, conjunctivitis, eyes filling with tears, drowsiness or desire to sleep during forced accommodation. On ophthalmoscopic examination congestion of the retina and choroid is often found. The foregoing symptoms are most frequently found in hyperopia or some forms of hyperopic astigmatism and compiled statistics show at least 70 per cent. of refractive errors are of the above class and are the etiologic factor in the local and the reflex nervous manifestations. While in myopia the patient may complain of headache and symptoms of accommodative asthenopia, similar to those of the hyperopia, yet the principal visual complaint will be the inability to see objects distinctly which lie beyond the far point.

A positive diagnosis and measurement of the degree of eye strain can only be determined when the accommodation is overcome and the eye is at rest, therefore the usual method of testing school children or others by the "chart test" is very unreliable and cannot be depended upon. The amplitude of accommodation in a child ten years of age is 14 dioptries and it is not an unusual occurrence in a young subject with an active accommodation to get 20-20 vision, yet, when this patient is put under the influence of a cyclo-

plegic his vision may be only 20-60. If we understand that the refraction of a normal eye is not materially reduced by the action of a cycloplegic we can readily appreciate the amount of accommodation necessary in the above case to give normal vision, and it should be easily understood why headaches and various reflex nervous disturbances would follow.

As to the treatment of accommodative asthenopia there can be no fixed and fast rules, as each case is a law unto its self, however the eye must be placed under the influence of a cycloplegic unless contra-indicated, and the refraction carefully measured by retinoscopy and verified by the trial lens. Where cramp of the ciliary muscle exists with hyperopia, which is not a common condition, it is imperative that the eye be placed under the influence of a reliable cycloplegic and kept in that condition until the relaxation of the muscle is complete. In cases of this character it is absolutely necessary to use atropine because of its decided and protracted cycloplegic effect.

In the myopic or near-sighted eye, we find the opposite conditions as compared to hyperopia. Myopia is always acquired and more frequently found among students or persons who use their eyes constantly for near work, and unless there are three or more diopters of uncomplicated myopia we are seldom consulted, except to give clear distant vision. When myopia exceeds three diopters the far point is so close to the eye, that the extra effort on the part of the muscles of convergence will produce muscular asthenopia. Especially is this true in exophoria as the muscles of convergence are weak. Since myopia is acquired and has a tendency to progress, all myopic eyes should be refracted early with the view of checking its progress to avoid the further stretching of its tunics, vitreous opacities and other complications.

Muscular imbalance is an insufficiency of one or more of the extra-ocular muscles and is usually found in conjunction with errors of refraction. The subjective symptoms so closely resemble those of accommodative asthenopia, that the two can only be differentiated by careful measurement. The most frequent cause of muscular imbalance is ammetropia but may be

due to anatomic defects of the orbit, one or more of the muscles, a weakness of the muscles individually or as the result of some systematic condition. Of the various divisions of muscular insufficiencies, time will not permit us to take under consideration more than two forms that are the most important factors in "eye strain;" exophoria or insufficiency of the internal recti and hyperphoria or an insufficiency of the inferior rectus of one eye. The only subjective symptoms that differ from accommodative asthenopia, are diplopia and a feeling of the eyes being crossed, accompanied by various reflex symptoms, as dizziness, nausea, vomiting or fainting and in some instances an inability to outline objects clearly; such subjects becoming alarmed fear sudden blindness. There are various ways and methods of making a diagnosis of muscular imbalance, but the only accurate and reliable method of making a diagnosis and measuring the insufficiency is with the Maddox rod and prism test. The relative strength of the opposing muscles should be measured to determine whether or not they approach the condition in the normal eye.

As to the treatment of muscular insufficiency, a Metropia being the most common cause, the first consideration must be its correction. The general health of the patient should be looked after, and the weak muscles if necessary should be strengthened by gymnastic exercises. The prescribing of prisms for constant use is contraindicated, except in hyperphoria, as the weak muscle is made weaker and the imbalance increased. Surgical interference or tenotomy of the strong muscle is only resorted to after all other measures have failed to give relief.

Retinal asthenopia or an intolerance or sensitiveness of the eye to light is the rarest form of "eye strain" and more frequently found in females. It may be brought about by over use of the eye in too bright or too dim a light, prolonged use of the eye, exposure of the eye to strong electric light or bright sunlight. The chief symptoms of retinal asthenopia are photophobia and lacrymation, although we undoubtedly see cases of various reflex nervous disturbances as the result of the bright sunlight in arid districts.

The treatment of retinal asthenopia, is to remove the cause. A metropia

must be corrected and the patient instructed to use the eyes for some regular work as it is not good practice to restrict all use of the eyes. Avoid the use of dark glasses, as the patient becomes accustomed to them and they eventually become an absolute necessity on all occasions. Careful attention to the general health is always indicated.

In conclusion we feel justified in making the statement that "eye strain" can only be relieved by the careful correction of refractive errors.

W. H. HUTT, M. D.

PIONEER OF THE ANTI-TUBERCULOSIS CRUSADE IN AMERICA.

"Honor to Whom Honor is Due,"

History is often wrong. It is strange how errors creep into the records of facts and deeds while the performers and participants are yet alive. Very frequently modesty prevents one from asking for honors due one and one alone, while one stands by and sees how to another are given cheers and glory. How often does not one accept glory and honors not his!

Germany has no dispute, *Brehmer* and *Dettweiler* are honored alike and in America the same attributes, which are given to *Brehmer*, in Europe, must be given to Dr. W. H. Hutt of Philadelphia.

Wm. H. Hutt was born in Philadelphia, August 18, 1847. As lad of sixteen he enlisted in 1863 in the U. S. Army and served for three years as Hospital Steward of the 8th U. S. Infantry.

In 1870 he graduated from the Medical Department of the University of Pennsylvania.

In 1872 he organized the Church Dispensary in Philadelphia and in 1873 established in connection with this Church Dispensary at Southwark, Phila. a special clinic for consumptives. In connection with this clinic and in order to give the poor tubercular the proper food a Diet Kitchen was instituted.

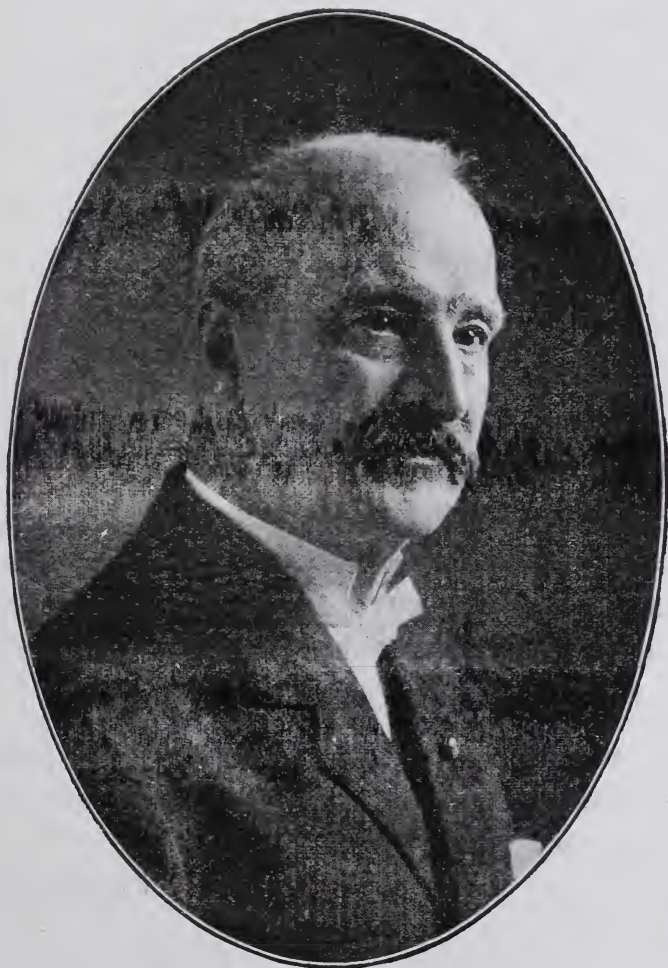
In 1876 through Hutt's efforts the first hospital, exclusively for consumptives, was established at 411 Spruce Street, Chestnut Hill, Philadelphia.

Small as the place was, inadequate according to our present knowledge,

it was a start in the right direction and the "House of Mercy" was a house of progress nevertheless. *Hutt* himself never imagined that this "House of Mercy" was ideal. It is a matter of record that he was already in those years an apostle and pioneer of the open air treatment.

In 1877 was instituted a fresh air Sanatorium for sick children at Point-Airy near Philadelphia.

Another special Dispensary for the treatment of tuberculosis was opened at 812 Walnut Street,



W. H. HUTT, M. D.

Following out his conception of the fresh air treatment, *Hutt*, the pioneer, did not rest until same was practically demonstrated at *Glen Mills*, Delaware County, Pa., to which place the dispensary was moved and transformed into a sanatorium.

Like many early workers, like many big hearted men of to-day, he lacked means. Neighbors of the locality protested, the public decried the treatment, they considered it an act of cruelty to expose the sick to the cold air. A bill was introduced into the legislature to support the enterprise, it was adopted but vetoed by Governor Beaver.

Hutt, the first pioneer, had to lay down, illness and lack of support were stronger than he; but luckily, the progress did not stop because in 1885 *Dr. E. Trudeau* opened the sanatorium at Saranac Lake, N. Y.

The first institution exists yet on *Chestnut Hill*, it belongs to the Philadelphia Protestant Episcopal City Mission and has cared for more than four thousand patients.

It must be a matter of pride for *Dr. Hutt* to see the seed sown in his early carrier, bear fruit. Every new institution is a monument for him also. Let us honor the man, who started out alone in the very crusade which is considered to-day the most important one.

Dr. Hutt, naturally, belongs to the National and State Association for the Study and Prevention of Tuberculosis. He is active in the Masonic and Pythian Fraternities, is National Commander of the U. S. Regular Army and Navy Veterans, Member of the Penna. Legion of Honor and holds many offices of honor.

The picture of the first American Sanatorium for the Tubercular ought to be in every institution throughout the country and the name of *Hutt* must never be forgotten.

FRANCIS T. B. FEST,

BOOK REVIEW.

TUBERCULOSIS A PREVENTABLE AND CURABLE DISEASE,

BY S. ADOLPHUS KNOFF, M. D.

Published by Moffat, Yard & Company, New York, 1909.

Knopf's name can not be separated from the fight against tuberculosis. Some of his writings have been translated into nearly all languages. His worth is international.

The present book is dedicated to Masters in Medicine, to Noble Men and Women, to Statesmen and Philanthropists because it is not a scientific treatise for the scientist but it a work which cleverly and clearly shows to the physician, citizen and statesmen the "Modern Methods for the Solution of the Tuberculosis Problem."

Knopf is concise; he wastes no time in teaching how and by what the disease is caused, he shows the many methods how it can be prevented and cured. He shows that he is fully versed with every phase of the situation. Many good illustrations illucidate the text. The book is of value for the physician and patient, the citizen and sanitarian and ought to be studied by everyone in touch with tuberculosis.

On page 373 is a reproduction of a sketch of the National Sanatorium at Las Vegas, N. M. as planned by its board.

A TEXT-BOOK OF OBSTETRICS: INCLUDING RELATED GYNECOLOGIC

OPERATIONS. BY BARTON COOKE HIRST, M. D.

Profesor of Obstetrics in the University of Pennsylvania. Sixth Revised Edition. Octavo of 992 pages, with 847 illustrations, 43 of them in colors. Philadelphia and London: W. B. Saunders Company, 1909.

Hirst understood to be complete without being bulky. The language is concise and to the point. All new methods like the Duehrsen-operation, hebotomy etc. are clearly described and all critic left out. The author gives his opinion in a few words and the reader has all essentials to use his judgement.

This edition has many new illustrations. Proper illustrations augment the value of a text-book and it seems that this requirement has been fulfilled to the highest degree. Not only the conciseness of text, nor also the good illustrations, but the scope made this work a model text-book, namely that the book is not limited to the physiology, pathology and technique of obstetrics alone, but attention has also been given to the operative technique of those diseases and conditions associated with or sequelae of pregnancy.

It is only logical that consequences of labor be treated in the textbooks of obstetrics and we are glad to see that this modern textbook is a model along these lines.

NEWS AND ITEMS OF INTEREST.

At the November meeting of the Chaves County Society, Dr. Yater read a paper and reported a case that so very much resembled malaria, that the society appointed a committee composed of Drs. Montgomery and Beeson to make investigations as to presence, in the Pecos Valley of the Anopheles mosquito.

At the October meeting of the Chaves County Society it was decided that through the winter months the society would hold meetings twice per month, setting apart the extra meeting for report of cases. The regular, 2d Thursday meeting for papers and discussions.

In view of the action of the A. M. A., the Chaves County society at its November meeting appointed a committee to arrange a program for a public meeting of the society to which all are invited. This meeting will be held some time in January, and it is hoped the best citizens of the city will turn out and that much good may be accomplished in the way of preventive medicine.

The Santa Fe Medical Society has invited the Bernalillo and Las Vegas Societies for a joint meeting in Santa Fe. Both Societies have accepted.

Organized at Portales, N. M. September 23rd., the Roosevelt County Medical Society.

| | | |
|-------------------|-------|---------------|
| J. F. Garmany, | | President, |
| W. E. Patterson, | | Vice-Pres. |
| H. F. Vandever, | | Secretary, |
| P. Worley, | | Treasurer, |
| E. T. Wilkinson, | } |Censors. |
| W. L. Souther, | | |
| T. C. White, Jr., | | |

Dr. C. D. Ottosen of Willard returned from a trip through Illinois and Iowa.

Dr. E. B. Shaw of Las Vegas attended the meeting of R. R. Surgeons at Topeka.

The following circular was sent to the members of the Committee and deserves compliance.

Dear Doctor:—

Your attention as a member of the Auxiliary Legislative Committee of the American Medical Association is respectfully called to the two enclosures as follows:

FIRST: The action of the House of Delegates with respect to "Open Meetings of County, District and other Local Medical Societies."

SECOND: Notice of the resignation of Dr. Charles A. L. Reed as a member of the Committee on Medical Legislation, with his message to the Auxiliary Legislative Committee and, through that Committee, to the medical profession.

You are respectfully requested to read both communications at the first meeting of your county medical society or otherwise to bring their subject-matter to the attention of the medical profession of your county and to secure such action in conformity therewith as may be deemed wise and expedient. It is furthermore suggested that open meetings of county societies

be held in December or January on account of the influence on state legislation.

FREDERIK R. GRUM.

Secretary Committee on Medical Legislation.

This refers to the following resolution.

(Extract from the minutes of the House of Delegates of the American Medical Association, Atlantic City, N. J., June 10, 1909.)

WHEREAS, The American Medical Association, not only as one of its declared purposes, but by numerous lines of activity, many of them connected with the Section on Hygiene and Sanitary Science, stands committed to the education of the public with respect to the nature and prevention of disease; and,

WHEREAS, The demand for such popular education with respect to tuberculosis, cancer, typhoid fever and other decimating diseases has become urgent; therefore be it

Resolved, that all county, district and other local medical societies be, and they are hereby, requested to hold annually one or more open meetings to which the public shall be invited to attend and participate and which shall be devoted to a discussion of the nature and prevention of disease and to the general hygiene welfare of the people.

It was moved that the resolution be adopted.

Seconded and carried unanimously.

GEORGE W. SIMOMNS

General Secretary American Medical Association.

The New Mexico Medical Journal

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EDITORIAL

The Bacillus Tuberculosis in the Circulation

Since our last issue the claims of **Rosenberger** were rather proved than disproved. We say "claims of **Rosenberger**. We gave expression to our seems to have aroused study and investigation along certain lines, the outcome of which may be of great prognostic value, if more than a postulate, and we have no reason to consider the objections of his opponents indubitable.

It seems strange that all opponents mention only **Rosenberger**, we gave expression to our astonishment last month. **Rosenberger** found the TB in the circulation in all of a series. His opponents do not say that they take exception to the finding in every case, their contention is that the TB does not, as a rule circulate in the blood. They do not limit his findings but try to overthrow the whole principle of his work, namely TB in the circulation at all, which cannot be called a "**Rosenberger**" claim proper.

The latest opponent, **Burvill-Holmes**, only quotes **Rosenberger**, mentions **Forsyth** and over-

looks **Liebermeister**, **Schittner**, **Albien Eber**, etc. Yet the reports on these are based upon a far greater material than **Burvill-Holmes**, **Swayer**, **Wilbur Ravenal**, **Brem** and the others together. It must not be forgotten that their findings were: TB were present in some incipient cases, in 22-33 1-3 per cent of the second and in 52-60 per cent of the third stage.

It seems strange also that on the other hand **Taussig's** report was overlooked entirely and this report is the outcome of just as conscientious work as any of the others. It is just as valuable even would strengthen their position, if negative findings alone could contravene any theory. In investigations of this nature the entire material must be sifted and not one contribution overlooked. The issue is too important. We are wrong also if we confine ourselves to one line of work. Every investigation which may prove lucigenous must find consideration. **Burvill-Holmes** quotes several American reports on the TB in the blood of animals and right here commits the sin

of omission by not quoting European publications, the substance of which is incongruous with the reports quoted by him. We refer for example to the dissertation of **Albien** and the valuable material treated therein. Furthermore all studies must find due consideration which investigate the TB in the fetal circulation in man and animal. The findings are positive very frequently. TB in the fetal circulation means TB in the circulaaion of the mother first. Is not the occurrence of tubercular lesions in placenta and decidua evidence of TB in the maternal circulation? Let us remember that **Schmorl** found tubercular lesions in the placentae of 45 per cent of tubercular parturients. Let us refer also to the numerous reports along these lines by **Geipel**, **Benecke**, **Kuerbitz**, **Kockel**, **Carl**, **Birch-Hirschfield** and to the reports from the pens of **Schrumpf** and **Jung** concerning TB in the decidua.

Let us remember also that the once nearly overthrown theory **Baumgarten's** the congenital tuberculosis of the newborn has been revived in a manner which means full recognition especially by **Kraemer**, **Hamburger**, **Haußer &c.**

Another strange omission is all reference to the work done by **Wright** in the naval Sanatorium. **Wright** is convinced of the correctness of **Rosenberger's** theory not through personal experience with this blood stainig but by logical deduction. He refers to the frequent presence of TB in the urine and, as we have ex-

pressed ourselves, in the last issue, **how can the kidneys secrete urine which contains TB without these very TB having been in the circulating blood first?**

Why is **Beardsley** not quoted? Why is the former work of **Rosenberger** concerning the presence of TB in the urine and sperma, allowed to go by unchallenged. If one finding is wrong, the other must be wrong also.

Has it been overlooked that the socalled "TB" is a mycobacterium and without own motion and therefore must be carried to its seat of activity?

How about the work of **Weismayr** and his theory based upon hematogenous infection?

In his studies about initial hemoptysis **Weismayr** demonstrated the avascular nature of the tubercle and its intraluminal origin and with it the old phthisis ab haemoptoe."

This all does not show the TB in a blood-stain but it proves that tuberculosis is a bacteremia.

Wright went further. He recalled the forgotten bacillus of **Lustgarten** to the forum of review. We all remember that **Lustgarten** found a bacillus, which is alike the smegma and lepra bacillus, which is morphologically and sometime tinctural like the TB which **has been** found in tissues, in the secretions and pus, which **Lustgarten** claimed to be the causative agent of syphilis and which was considered by many. While on the other hand some failed to demonstrate this organism at all.

The discovery of the spirocheta pallida made us forget all about this bacillus, which certainly has been seen years ago and which, as **Wright** maintains, cannot have gone out of existence. **Wright** recalls the obsolete subject of many a dispute and recognizes in it the TB. He may be right. It is probable that he is right.

While reading **Wright's** address to the Colorado State Society with these claims the memory of the writer went back to the times of the **Lustgarten** tournament and one incident came back. **Baumgarten**, if our memory does not deceive us, made already the statement that the bacillus of **Lustgarten** is identical with the TB.

It was also **Baumgarten** who explained the tubercular foci in the bones by the lodging of bacteria carried there by the bloodstream. The supposed presence of the TB in the circulation is therefore not quite new and the opponents must sift much more material than just the latest article of **Rosenberger** and a few others.

The writer has no occasion to change the views expressed in his paper before the New Mexico Medical Society. His findings were those of **Liebermeister**, but he accepts the probability of **Rosenberger's** theory.

Ravenal published a small number of negative stains. The report is very meagre while the article from the pen of **Burvill-Holmes** is valuable and represents conscientious work. He started out independently, ad-

opted **Rosenberger's** technique after failure with his own and now seems to be indoctrinated by the work of **Brem &c.** It appears that his deductions run in rather forced channels of logic because an analysis of his report will serve to demonstrate the probability of TB in the circulation. There ought to be no incontrovertibility in this kind of work; methodized research will decide the question in course of time.

Burvill-Holmes found acid-fast rods in the blood, he claims that they are not the Koch-bacillus but some other organism so far unknown. To look for an acid-fast organism when looking for TB may prove disastrous, because the TB, as well known, is facultatively not acid-fast. But, taking for granted that the TB be acid-fast, what has been proven? What has been disproven? **Brem** accuses the water used during the staining process to be the carrier of the acid-fast organism. **Burvill-Holmes** adopts these views. This unknown bacillus can be stained only when first mixed with albumen. Why not claim that the albumen is the carrier of the organism? Far be it from our intention of making such assertion, but such a deduction may be justified. Much more work will have to be done before the issue is decided upon.

As said before, **Burvill-Holmes's** article is a valuable support of the presence of TB in the blood of consumptives. He finds an acid-fast rod in the blood but refuses to recognize it as the TB. At the same time his

cases present tubercular symptoms and the finding of TB in the blood would be only natural. Why not accept the most natural theory and strain facts to disprove what may look apparent?

One case died of miliary tuberculosis, **Burvell-Holmes** would believe so if a room-mate had not died of meningeal infection and if the meningococcus had not been present. If the two had died in one room in Hongkong and the bacillus pestis had been found in addition to the TB who who have denied the tubercular nature?

A concurrent disease cannot do away with the possibility of a previous tubercular infection.

The acid fast bacillus was also found in an old woman with senile pneumonia, is it not more logical to believe the woman had a tubercular infection?—Senile tuberculosis is often very masked.

Inoculation experiments are not satisfactory. We again refer to the article by **Schnitter** and his condemnation of such tests. The incipient case naturally will have very few vacilli in the quantity of blood used for inoculation. What will be the natural consequence

Have we forgotten our teachings of a decade ago? The influence of quantity—we mean the number of bacteria—is shown in subcutaneous, intravenous and intraperitoneal injections by **Hirschberger, Gebhardt and Wyssokowitch**. Rabbits which were inoculated with less than one hundred and fifty bacteria

did not develop tubercular lesions in the experiments of **Wyssokowitch**. These workers believed to use more or less definite numbers. May the numbers be accurate or not, the fact remains that blood with few TB can not be as good a medium for inoculation experiments.

Is the very individual bitten by a malaria-infested mosquito a sure victim of the disease? Why should it be different here? The search for the TB in the blood reminds one of the search for the plasmodium. Every frank worker in malaria must acknowledge how difficult it is often in a case, clinically doubtless malaria, to demonstrate the plasmodium. If medication, coincidences, conditions &c make it difficult to find one parasite why should this not apply to the TB? We have accepted the theory that in malaria the plasmodium malariae is always present and without it no malaria. The time will come that the same viewpoint is taken in regard to tuberculosis and blood. The hematogenous origin, its presence in the bloodstream explains much which otherwise can not be understood.

We suggest that the critics review the subject, pro seu contra, American or German, positive or negative and then a solution will be reached far sooner.

This controversy reminds us of the old ones about the TB and the present one pending yet about the quality of the TB and the Perlsucht-bacillus.

FEST.

· · Climate · ·

We are, all of us, more or less, believers in climate in the treatment of tuberculosis. Since the disease was first recognized and long before the causative agent was discovered people were advised a change of climate in the hopes of benefitting their health. And fair minded men today and in the future will continue to proffer this advice until some drug or serum is found that is known to be specific in the treatment of this disease.

Some of us admit openly the value of climatic change while others deny its beneficial effects, but practice it nevertheless. The man who changes his patient from a damp basement or a stuffy attic to a properly ventilated tent of shack in his home country has unconsciously advised a change of climate. The people who erect state and municipal sanatoria in the north and east look for the spot in that country which as nearly as possible will act as a poor substitute for the dry air and sunshine of the favored southwest.

Climate is of necessity a matter of clinical impressons. Statistics are of little avail in comparison of results here and elsewhere. No two men are wont to classfy a given patient in the same class of cases even though with all sincerity they endeavor to follow the Turban classification. This universal method gives us a fairly good way of

drawing conclusions from results here and in eastern and northern institutions but there still is the element of individuality to be considered.

When a man says we obtain cures in eighty-five or ninety per cent of the incipient cases in the west and southwest against sixty or seventy per cent east and north then the question arises are his classifications as carefully made and are his conclusions as to results in given cases as closely cut as are those of his eastern fellow-worker. I believe they are not, but I still blieve that climate plays a role and not a minor one in the treatment of tuberculosis.

We know that not a few patients come west and lead lives that would drive the average consumptive into an early grave and yet in the years to come we find them well and living active lives in their adopted country. In fact a large part of the population of Colorado, New Mexico, Arizona and west Texas are or have been victims of tuberculosis at sometime during their career. This one cannot say of the people east. There the results are obtained in nearly all cases in incipient patients. After one reaches the far advanced stage the eastern man loses interest in his case and he is advised to go west and try his luck, that being his last and only chance. How strange that those who knock the value of the

climate most persistantly will advise a change when the unfavorable climate has reduced the victim's chances to a minimum?

We recognize the fact that climate per se is not a specific in tuberculosis, but we also know from experience that more wonderful cures and far better results are obtained in the southwest in the treatment of this disease than in any part of the United States. Yet we do not condemn the establishment of sanatoria in other less favored regions. We believe that they have their place in the crusade against the Great White Plague. They act as educational institutions teaching masses afflicted with this scourge how best to care for themselves and how not to spread the disease broadcast. And they affect cures in the early stages and arrest the condition in a small percentage of further advanced cases, but for them to do the work that is done in this section of the country is impossible. Give us even a small percentage of the favorable cases treated at home and the results would far exceed the fondest dreams of those interested in the so-called curability or improvability of this disease. The mis-

sion of the eastern sanatoria should be to care for people without sufficient means to afford a stay in this more favored section. The man or woman who can afford the luxury of climate is unfortunate indeed if he or she has not been advised by an honest physician of the greater chances of cure that the southwest has to offer, and having been given this advice has not heeded the counsel and availed himself of the dry air and sunshine that the country God forgot is able to confer upon the unfortunate victim.

The climatic controversy will no doubt remain unsettled, as long there are doctors east and doctors west, but even so, as long as there are consumptives east there will be consumptives west because a certain percentage after chasing a will 'o the wisp in the cold and damp eastern states will out of self protection ignore the claims made for home treatment and cast their lot with the rest of us who would rather enjoy life in the sunshine of New Mexico's hills and plains than fill a grave in the frozen regions of the north.

LE ROY L. PETERS.

Specific Treatment of Tuberculosis

There is none.

Tuberculosis has been cured by some agents. Cure is ascribed to many more. Each practitioner has cured tuberculosis in his own way. New methods chase each

other. Today one publishes a long list of cures, a second publishes the next day a long series of failures with the same measures. Only nature's specific trio remains unshaken in authority

namely: climate, air and food.

Wright has a large experience with mercury. He is not the first to use it, but he is the first to methodize its use. His reports are worth studying. But,—is it a specific?

Creosote finds many advocates, the Medical Record only shortly had an article which makes it a specific. Here belong all preparations of creosote and guajacol iron the foul odored geosot to the bland thiocol. But,—are they specifics?

There is the theory of lime starvation and calcium and lime-solvents are recommended. Many cures are listed. But—are they specific.

The men from the laboratories say tuberculin. It will cause the formation of aggressins, of opsonins &c. It will help the system to kill off its little enemies. But,—what can one drop do in an ocean of infected blood? Is it therefore a specific?—In its present form certainly not, but the nearest to it is so far a sign of progress in the right direction. It will do all **Koch** expected from it, but not until it has been changed.

Tuberculin has its place in therapy. In well selected cases applied in the proper dose it is the best specific we know if we give the specifics of nature a chance to do the most. It is useless when it must be given in doses too small to be of value as the dose must be in the advanced case and the overdose in the incipient may produce too violent a reaction.

What is therefore to be done

with the case beyond the cope of tuberculin?

There is mercury and there is arsenic. Their administration is scientific. Tuberculosis is a bacteremia and also a toxemia. It is here like with tuberculin, the keynote of success is the proper dosage in the proper case. Tuberculin is limited as curative agent to the incipient. Hg is indicated yet in the advanced. There is no need of giving muscular injections; a far superior way is giving it intravenously. Less is required the Hg action is more marked and there will be only very seldom a local reaction and that only when the vein is missed some way. The writer used in the tropics first the cacodylates of quinin and mercury, alternating whenever malaria was present. Later he used atoxyl and hermophenyl in alternation. The results were good; often the drugs did what was expected, and to be frank, a cure was hardly expected. Hg has been used in this country, in this city before **Wright** published his method, but never as a specific.

That creosote, guajacol and other drugs may benefit is daily experience. Their merit is not as antiphthyscium but due to their effect upon the mucous membranes and a gastric and intestinal antiseptic. Whatever we may need in tuberculosis and its systematic use in the suitable case is certainly as much indicated as any remedy which will do good in any case. To force a patient to take the bad-smelling preparations, including the high priced valerianates,

when the stomach revolts, is as poor policy as to force tuberculin to the anaphylactic point or Hg to salivation and gingivitis. Some of the derivatives however are as a rule stood by almost any stomach: like thiocol. It's systematic use in connection with oils, like oil of cloves, cassia or nutmeg which we know are of some influence upon the cough, cannot be decried. We may do good even if they are no specifics. Why not use them all, and even combine them when indicated as long as our nearest

specifics is in its embryonic stage?

Above all, whenever possible, use nature's true specific, as the very best combination and everything else only as accessory. This is good not only out here in nature's own health resort. In the crowded cities among the poor who cannot find admission to the proper surroundings these pseudo-specifics must be relied upon for whatever good they may do.

FEST.

Altitude a Natural Specific

It is time that the question be settled: **is altitude beneficial in tuberculosis or not?**—

This depends again upon the question: **has altitude any therapeutic effect at all?**—

This has been solved long, long ago. Change to alpine altitude means increase of erythrocytes and hemoglobin. This is due to the influence of the barometric change upon the respiratory functions and the action of the heart. There is no need to enter into any discussion or repetition of any of the many theories of **Solly, Fick, Winternitz, Grawiitz, Bunge** and the host of others who have tried to solve the problem.

The fact remains, alpine altitude has as sure an influence upon the human system as morphin, ice-water, sea air, steam or calomel. Ignorance only can claim that such effect is absent.

Now, if altitude has such effect, **especially if combined with sunshine and dryness, why not use it therapeutically?**—

To withdraw or withhold this therapeutic measure from an afflicted who is in condition to enjoy its benefit is as wrong as to withhold quinin from the sufferer of malaria.

Yet this is done. Papers are read and published, such wrong information is disseminated amongst the laity which is a denial of the therapeutic value of altitude in tuberculosis. Our respect for our noble profession makes us believe that these negations and assumptions are based upon ignorance, want of knowledge in an important branch of the medical science. It goes against our desire, it revolts against our professional honor to believe that there might be other motives. At the

same time we must confess that this task of so-believing is sometimes rather difficult and a strain on our conviction particularly when by "**mere coincidence**" as a rule these teachers of ignorance are "**lung specialists**," writers on the subject in the low-lands and often "**by chance**" connected in some way with some large and non-philanthropic sanatorium!!!—

But, as said before, we consider this a mere coincidence and hope that time and experience will teach these rudimentary fact. It is true that during that time some lives could have been saved, but it is a consolation that a hopeless case can be sent West when home-treatment fails,—and then everything was done which could be done!!!—

Some may use the argument that the effects of the altitude are only compensatory. Even so, as long as good is derived therefrom and the anemic phthisic certainly needs a change in his blood which is excessive in proportion because thus an additional stimulus is produced which exactly replaces what is wanting and adds to it.

Cytotic improvement, dia-

phony and pulmonary compensation are not all. We have also immunity and immunisation. We have adopted the teachings about agglutins and precipitins. We have recognized **Koch's** test for precipitins as the standard in principle, not withstanding modifications in its technique.

The value of any specific, serum, antitoxin, globulin or whatever name we give the special kind of agent which leads to immunisation, depends upon the increase of the specific precipitins in the blood. **The precipitin test of a tubercular after being transferred to an alpine climate shows a marked increase of the precipitins over tests made on the same individual directly before leaving the lowlands. (Fuchs-Wolfring.)**

If we adopt the theory of **Spengler** according to which immunity is not due to conditions in the serum (plasma) but due to processes within the blood cells, the increase of the erythrocytes in the altitudes explains what so far hypothetic in regard to a specific value of alpine altitude in tuberculosis. Therefore the fact remains:

Altitude is nature's specific!

FEST.

ORIGINAL ARTICLES

PELVIC INFLAMMATION

By A. H. Faith, M. D., Clovis, N. M.

Polk says, "The intimate relation existing between the fallopian tubes, the ovaries, and peritoneum compels the almost constant association which is characteristic of the lesions of the inflammations affecting them, and this association is so close, that while it may be possible to determine clinically, which structures present the prominent lesions, it is generally impossible to determine by symptoms and signs alone the presence or absence of minor changes in the other."

In view of this close anatomical, pathological and clinical association, I shall not attempt in my remarks to say where, practically, a perimetritis ends and a parametritis begins.

Quite often oophoritis, salpingitis, cellulitis, and pelvic peritonitis are caused by endometritis and metritis, the poison being carried through the tubes or by the lymphatics. There are exceptions as acute suppression of menstruation and certain tumors as dermoid cysts and ovarian tumor, the ectopic rupture of corpus luteum cysts, pregnancy, and abscess of the vermiform appendix. Even in the cases of tumors the pressure of such a growth upon uterus sometimes causes chronic inflammation of this organ. I believe

all authorities agree in distinguishing a septic and a specific form of perimetritis. The specific form of perimetritis is caused by gonorrhoeal tubercular infection. Septic infection enters in one of two ways; wounds caused by operation, the use of tents, the use of uterine sounds or other instruments; or through the wounds caused by child-bearing and abortion.

Gonorrhoeal infection usually arises from coitus, with a man suffering from gleet, whose gonorrhea has perhaps been for some time, may be, for years in a chronic form. The inflammation spreads either by the mucous membrane or by the lymphatics to the pelvic peritoneum. Since gonorrhea spares no section of the genital tract, we find it one of the chief causes of perimetritis, which is probably the most worrisome and the most difficult to treat of all gynecological diseases. As the number of men suffering from gonorrhea is very great, the corresponding gonorrhoeal perimetritis in women is a very common disease.

Latent gonorrhea is the cause of grave gynecological disease. As a rule the beginning of a disease, which is finally seen by the gynecologist in the form of perimetritis, can be traced back in a married woman

to early married life, when the disease commenced with possibly bladder troubles and great discharge this gradually led on to the indorsement of the whole genital tract, and finally permanent invalidism and sterility. It is said by some that in one-third of the barren marriages the man is to blame.

The cause of inflammatory diseases which arise from gonorrhea is not simply the gonococcus. But as has been shown other cocci, for which the gonococcus paves the way for entrance and multiplication cause mixed infection, yet gonococci alone can set up a typical peritonitis.

In septic perimetritis there is glueing together of the bowels in the pelvis, hence, on section one finds the pouch of Douglas closed in by the cohesed loops of bowels. In the space thus formed a fluid exudation is found which may be serous, fibronous, purulent, or foul in character. The serous or fibronous exudation may become inspissated and finally absorbed, or lead to adhesions and dislocation of the uterus and appendages or it may suppurate; the purulent and foul exudation produce death by pyemia or potomaine intoxication, unless the strength of the patient can carry her on until spontaneous rupture of the abscesses or their opening by the surgeon.

Bursting occurs most commonly into the large intestine, less often through the abdominal parietes, or into the bladder and vagina. If perimetritic exudations remain stationary for

months or years or relapse easily, so that fresh febrile attacks and finally spontaneous rupture takes place the probable cause lies in the presence of purulent tubal catarrh or ovarian abscesses. In gonorrheal perimetritis the chief seat of the disease is in the region of the tubes and ovaries, and generally at the sides of the uterus. Perimetritic membranes between which pus can lie, enclose the disease tubes and ovaries.

Some say that non-infectious perimetritis is characterized solely by formation of adhesions and cohesions between the adjacent peritoneal surfaces. The same kind of vascular adhesions arise in retroflexion of the uterus and prolapses of the ovaries, in ovarian cysts and myomata and from the escape of cyst contents. The symptoms of septic perimetritis consist of great pain in the abdomen distention, high fever and sometimes vomiting. If the exudation is completely absorbed all symptoms disappear but if the exudation remains long in a stationary condition, more or less severe pains pressure symptoms and bladder trouble continue. If adhesions are left behind displacement and secondary diseases of the uterus ovaries and tubes take place. In this way fresh perimetritic irritation is set up—a vicious circle, which explains the difficulty of curing perimetritis. Should the exudation become purulent or decomposed, the fever comes on anew with specially high evening temperatures.

The result is that, unless spontaneous rupture or incision come to the rescue death ensues or gradual inspissation and absorption of the pus take place. Even after bursting, death may take place from prolonged suppuration. These cases, as a rule, are difficult to manage therapeutically.

Gonorrheal perimetritis is chronic from the first and is characterized by the most varied kinds of pains in the belly, which become intense at the menstrual periods, on straining in defaecation and cohabitation. The gonorrheal origin of perimetritis is rendered very probable by the presence of a tubal sac, and is made certain when the other evidences of gonorrhea are obtained from the history. A perimetritic exudation is distinguished by its completely filling up the space between the posterior pelvic wall and the uterus. It runs right into both of the posterior pelvic walls and the back of the uterus; it is immovable itself and also fixes the uterus. It depresses the posterior vaginal fornix, and pushes the uterus forward. The upper limit is only to be made out indefinitely since it is formed by the adherent coils of the intestines.

Retro-uterine hematocele has the same physical signs but in contrary distinction to perimetritic exudation the former begins without fever. Recent exudations are very tender on pressure.

Perimetritic adhesions are recognized, in first place, by the

fixation of the uterus, tubes, and ovarian organs which normally are moveable. The prognosis of perimetritis is unfavorable; still in many cases the discomforts may be removed by rational treatment. In recent exudations absolute rest in bed is indicated at once. Opium and applications of ice bags are additional aids when severe peritonitic symptoms are present. When the symptoms are less severe; probably as good a thing as we can do is to give enough calomel to move bowels well. If fever and pain subside, warm fomentations are used. In two or three weeks hot douches may be begun. Icthyol with fifty per cent glycerine locally.

If the exudation becomes purulent or decomposed it should be incised early. As a rule, the opening is made in the posterior vaginal fornix. But if, owing to the high position of the abscess, it can not be reached per vaginam then it should be opened from the belly wall in case it be adhered there. If not adherent the opening of the abscess in two stages is recommended. By plugging the abdominal incision with iodoform gauze the wound and the exposed part of the abscess will become shut off from the general peritoneal cavity and then the abscess can be opened without any of the pus getting into the peritoneal cavity.

Parametritis is an inflammation of the connective tissues lying under the peritoneum. This lies chiefly in masses laterally between the folds of the

broad ligaments whilst there is but little connective tissue in front of and behind the uterus. The inflammation therefore at the sides of the uterus is most extensive—true parametritis—yet anterior parametritis, inflammation of the connective tissues lying between the bladder and the uterus, and posterior parametritis, inflammation of the connective tissues in the folds of Douglas pouch, play an important part, especially in the displacement of the uterus.

Since the peritoneum arises out of the pelvis on every side it is evident that an inflammation of the connective tissues lying underneath the peritoneum, which begins in the pelvis, can extend to the regions of the kidneys behind, to the iliac fossa laterally, and upon the parietes over Poupart ligaments in front. Parametritis is a cellulitis which arises from an infected wound. It arises most commonly during puerperium, also, through infections from operative measures, and from gonorrhea.

A parametritic abscess opens spontaneously, most commonly above Poupart's ligament, less frequently by the ischial foramen, at the outer margin of the quadratus lumborum, beneath Poupart's ligament, into the vagina, and in the bladder and rectum. It may be opened at either of the first five places.

Salpingitis is usually caused by infection, and indeed, as a rule, by extension of an inflammatory process from the uterus to the tubes. Salpingitis most commonly follows puerperal di-

seases and gonorrhea, which is conducted either by the way of the mucous membrane of the lymphatics. Tuberculosis of the tubes may occur as secondary disease. Thickening of the walls of the tubes take place from the muscular hypertrophy. Unless the discharge can take place they form hydro-salpinx. Purulent salpingitis under the same conditions leads to pyosalpinx. In this way the epithelium of the tubes is always destroyed, and the small celled infiltration and the purulent softening implicates the tube walls.

Through the escape of the contents into the peritoneal cavity fatal peritonitis may occasionally occur, more frequently perimetritic adhesions between the ostium of the tube and the ovary or glueing together of the peritoneal surfaces of the fimbriae take place, and thus the ostium abdominale of the tube becomes occluded. The secretion of the tube now gathers near the occlusion and a swelling forms, which grows larger and continually gets nearer the uterine ostium of the tube, unless perimetritic bands and cords have compressed the tube in its course. In this way the secretion may escape and a spontaneous cure result.

The whole character of the disease of salpingitis is governed by the co-existent perimetritis; so long as this is still absent there may be pains, but these are easily explained by the uterine inflammation. One can first attribute part of the belly symptoms to the account of salping-

itis, when on bimanual examination the tubes are felt as thickened tender cords, which spring high up from the uterine cornua and end free in the pelvis laterally or posteriorly.

On examination these signs are found which establish the diagnosis of "tubal sack." Frequently on both sides, long sausage shaped tumors are felt, which arise by a slender stock from the fundus uteri, and terminate in a thick clubbed swelling. These often extend backward into the pouch of Douglas and are fixed there. On each tumor, itself, depressions and elevations can be felt, and immediately united with the ovary. The new tumor is nearly as sensitive to pressure as a chronically inflamed ovary; it possesses a very limited mobility, in which the uterus joins.

Prognosis of salpingitis is unfavorable since syphilitic or pyosalpinx occur so frequently.

By bursting of a pyosalpinx a fatal peritonitis may be caused. Sterility is generally present in a double-sided disease, and always in a double tubal occlusion.

TREATMENT: There must be rest in bed during the first stage of the disease. To insure the escape of the discharge vaginal douches and uterine douches, when there is but little tenderness, are used. Even in a pyosalpinx a marked lessening or even a complete disappearance of pain may be obtained by rest in bed. Use wet packs and a tampon of cotton soaked in a twenty per cent of Ichthyol and eighty per cent glycerine solution pushed into the posterior fornix every other day. If all treatment fails, extirpation of the diseased appendages should be done.

Read at the meeting of the New Mexico Medical Society. Roswell. 1909.

Treatment of Typhoid Fever in Private Practice

By L. H. Pate, M. D., Lake Arthur, N. M.

The subject chosen for this paper is one that has been discussed pro and con, since Louis of Paris, in 1829 first emphasized a number of its cardinal points, and Gerhardt of Philadelphia, in 1837 under the guidance of Louis proved the disease to be a separate entity.

The treatment of typhoid fever in private practice is ever an interesting subject to the

physician. One which I dare say has caused as much study as any of the infectious diseases. So much indeed that it would require volumes to record all that has been written concerning it. Still its successful treatment is a subject that is well worthy the best efforts of our skilled men.

It is our purpose in this brief paper to discuss at length the treatment of typhoid fever

in its many complicated forms, but rather to give the method of treatment which has proven most successful in the hands of the writer as a private practitioner and under circumstances which preclude the use of hospital advantages, and where properly trained nursing is not to be obtained. Under these conditions a very large per cent of Typhoid Fever must be treated.

The following is the plan pursued by the writer:

Medicines: Drugs are not to be employed if they can be avoided, that is they are not to be used unless they are certainly indicated. The antipyretic drugs are particularly harmful if their use is resorted to simultaneously with bathing. Their only use in a case that can be properly nursed and bathed is for the purpose of relieving headache and backache, when they may be given in small doses, such as acetanilid in 2 grain doses three or four times a day. As soon as the patient comes under observation, calomel is given 1 to 2 grains in quarter grain doses every hour. If his bowels are not moved in ten to twelve hours a movement is produced by the aid of a rectal injection of soap and water or a saline laxative. Calomel is then continued throughout the disease in tenth or twelfth grain doses every two to six hours to meet the requirements of the individual case. Calomel is given in preference to any other purgative for the reason that it not only acts as a laxative but is one of our best intestinal antiseptics as well. Its

laxative effects on the bowels greatly aid the elimination of effete material and foul smelling stools, while its action through the blood combats the infection and prevents to a great extent relapses or reinfections. Also the calomel exerts a beneficial influence on the liver which is often sluggish or inactive in this disease.

Hydrochloric or sulphurous acid combined with the essence of pepsin is given every six hours after food, and is usually continued throughout the disease because of the benefit to the stomach in aiding digestion and preventing to a great extent the formation of gases and fermentation.

Stimulants:—Stimulants are to be used only when the pulse is weak and the cardiac first found is beginning to become feeble. The best of these is whiskey or brandy diluted and given in half ounce doses every three to four hours as required. Many cases do better without stimulation, while others need larger doses of alcohol than those just named. Hoffman's anodyne in drachm doses every two or three hours when the condition of the heart is desperate is valuable. Strychnine is also to be used, but it is not best to use it as a routine, but only when indicated and for a few doses only.

Antiseptics—Absolute intestinal antiseptics can not be produced by any known means, although by the use of proper remedies we are able to materially modify the growth of the microorganisms. If the physician

thinks by their use he destroys the bacillus typhosis and so benefits his patient he is largely in error and his use of them is not rational, because the bacillus in the early stages is not free in the bowel, and in the later stages is distributed in every part of the body. If on the other hand these remedies are given to combat intestinal fermentation as shown by the foul smelling stools and tympanites and other of the nonspecific bacteria which throng the bowel during the progress of the fever, his use of them is rational in that by this means other toxic materials are prevented from being generated in excess. Many antiseptics are in use but as a rule I prefer the mercury as described above.

Hydrotheraphy:—An order is given that if the temperature rises to 102°, the patient is to be rubbed with tepid, cool or cold water according to the degree with which his temperature resists the bath, and according to the toxemia present. When the toxemia is great a brisk rub with cold water or a piece of ice is good to cause a reaction good to cause a reaction and arouse the patient's vitality. Ordinarily sponging with cold water, especially the spine and limbs will keep the temperature within reasonable limits and render the patient more comfortable, if persistently carried out. When the patient is very weak and does not react to the cold sponging readily, the water should be warm or hot as reaction must be produced or intern-

al congestion is increased. Cold water or the ice bag should be used on the head to prevent cerebral congestion.

Some form of bath at least once a day is necessary even if the temperature does not rise enough to require sponging, to establish cleanliness and equalize the circulation.

He who treats typhoid fever without resort to hydrotheraphy, if it can be used, is doing all that can be done.

The use of hydrotheraphy greatly lowers the mortality. It is said saving 10 in every 100 cases, but it does not diminish the frequency of perforation or hemorrhage, nor does it shorten the duration of the fever, but it often shortens the length of the illness by preventing complications.

Diet—The diet consists of milk, eggs, broths and fruit juices. Buttermilk is far more preferable as it does not coagulate in the stomach and produce tympanities as does sweet milk, most delicate stomach. Two to three pints should be given each twenty-four hours, divided so as to be given three to four hours apart. The white of an egg given in the milk greatly adds to its nourishing properties.

The juice from three to four oranges a day is nourishing and has a beneficial effect on the alimentary canal, aiding the stomach by relieving nausea and assisting the bowels to act more freely as fruit acids do and at the same time assist in keeping up the alkalinity of the blood. Grape and other fruit juices

have the same beneficial effect.

Large amounts of water in the form of lemonade or ice water to keep the tissues of the body supplied with the proper amount of fluids and flush the kidneys keeping them active should be given.

Some writers condemn the use of meat broths, on the ground that they are good culture media and tend to produce tympanities. While this is probably true as to large quantities, I have seldom met with such results when they are properly prepared and given in small amounts as they are easily digested and are very nourishing. They are especially desirable during the stage of convalescence and given in increased amounts. If the stomach be irritable a little lime water may be given and is usually sufficient to allay the irritation.

Treatment of special symptoms:—Constipation is relieved preferably by enemas of glycerine and water or soap and water. Olive oil or castor oil may be given once or twice a day if the injections do not relieve.

Diarrhea:—If excessive is controlled by the use of five to ten grains of Bismuth Subnitrate every three to four hours, much larger doses may be given if needed. Aromatic Sulphuric acid 10 drops in simple elixir given every three hours is a very reliable remedy. Rectal injections of normal saline solution to which has been added a drachm of Bismuth Subnitrate materially aids in controlling the irritation of the lower bowel.

Tympanites:—A turpentine stupe is placed over the belly before the gas accumulates in any very great amounts. And injection of a drachm given in 10 drop doses in emulsion or capsule every four to six hours by the mouth is probably one of our best remedies. If the gas does not pass away it may be aided by using a long rectal tube.

Hemorrhage from the bowel does not offer much opportunity for direct treatment. In a majority of cases the best we can do is to maintain body heat by the application of external heat. If the circulation becomes feeble a hypodermoclysis of normal saline once, twice or thrice in the succeeding twenty-four hours as the case requires.

There are not any astringents to be given by the mouth that we could hope to reach the affected part. A small ice bag applied to the belly, at the same time hot water bottles to the extremities may do good by influencing the circulation in the intestine, opium at this time may do good by diminishing peristalsis.

The treatment of perforation consists of giving opium to relieve pain and employing heat and stimulants, and an abdominal operation at once if circumstances admit of it at all.

During convalescence the patient should be fed with increasing amounts of nutritious easily digested food, and the administration of iron of which Baschams' Mixture is an excellent preparation.

In the preparation of this

paper the writer has confined it to the treatment employed by him in typhoid fever in the form which usually come under observation.

In the naming of drugs I realize that there are many and very valuable ones of which mention has not been made. But as one can not use all the drugs that are valuable in a given disease, I believe that to outline a treatment, chosen from our best authors and studiously put into practical use is the best way to become thoroughly acquainted with its effects and the indication for its use, and is far more efficient than to use a greater

number of drugs and not be able to obtain their best effects.

For this reason I submit my efforts for your consideration, with the desire that you grasp the point I had in mind while preparing these remarks, that is the restricted and more rational use of drugs in the treatment of typhoid fever.

Thanking you for the honor of appearing before this body of distinguished men of our profession, and upon a subject of so much interest.

Read at the meeting of the New Mexico Medical Society, Roswell, 1909.

ECTOPIC GESTALION

By H. A. Ingalls, M. D., Roswell, N. M.

No one condition of grave importance to both the physician and the surgeon has received more thought and attention than the diagnosis and treatment of the abnormal implantation of the gestation sac.

Since the development of a technic that allows prompt entrance to the abdominal and pelvic cavities, more and more cases are being reported and the mortality rate is growing less each year.

Prior to the initial step of that pioneer in gynecological endeavor, Lawson Tait, in 1883, these cases were left to the care of nature whose death record was almost 100 per cent.

In considering the aetiology of this condition, many theories

have been advanced, no one of which is applicable to all cases.

From our observation, we are inclined to believe former inflammatory conditions of the uterus and appendages responsible for the condition in the vast majority of cases. A number of factors are doubtless responsible:—

1st—The destruction of the ciliated epithelium of the tubes, rendering difficult the passage of the ovum to the uterine cavity.

2nd—Adhesions that transform the tube from straight canal to a tortuous one.

3rd—Stricture of the tubes, as the result of a gonorrheal or other ulceration of the mucus coat.

4th—Scar tissue in the walls of tubes that prevent muscular contraction.

Among other causes noted are: — Diverticular, tumors, polypi twin ova, abnormal ova and faulty development.

We divide these cases into tubal, ovarian, abdominal and uterine, yet this classification is disputed.

The great majority at operation and post-mortem are found to be tubal. This form is subdivided into ampullar, isthmic and interstitial named in the order of their frequency.

In the ovarian form, the foetal sac must occupy the position of the ovary and contain ovarian tissue, to make a positive differentiation from tubal pregnancy.

The abdominal form, due to migration of the ovum, is that condition where uterus, tubes and ovaries present a normal aspect and the gestation sac is implanted on the peritoneal surface.

The uterine type is that found in the narrow horn of an imperfect uterus wherein rupture takes place into the folds of the broad ligament or into the general peritoneal cavity.

In considering symptoms it may be stated, in general terms, that the condition differs very little in this respect from a normal pregnancy.

In the majority of cases reported in multipara the morning sickness has been less severe in extra uterine pregnancy than in normal and slight pain one or the other side of the median line noticed that was not present in former pregnancies.

A woman who has been regular in menstruation and who develops a menorrhagia after a delay, especially if under the impression she is pregnant, demands a thorough examination as this is doubtless the most constant symptom.

Unfortunately we rarely see these cases prior to rupture or until after tubal abortion.

The symptoms are then characteristic; our patient gives a history of sudden sharp lacerating pain in the lower abdomen, most frequently in one of the ovarian region, followed by extreme weakness. The features are pinched, the expression anxious, skin pallid, pulse weak and rapid and the temperature subnormal.

If the rupture has taken place into the peritoneal cavity the situation becomes grave and the shock from loss of blood is extreme; if into the folds of the broad ligament the haematoma becomes palpable and the symptoms are less severe.

In some instances the placenta remains in the floor of the tube and the foetus continues to develop within the general peritoneal cavity. Here the haemorrhage is not severe, and we must rely on the continuance of the pain to indicate the condition. If not relieved by operation the abdominal pregnancy usually continues to term when labor pains begin. These are usually like the early pains of a normal labor. After continuing for a few hours, or even days, these cease, due to arrest of foetal circulation and death of the foetus.

Should death of the foetus occur at time of rupture, which usually occurs before the twelfth week, the foetus may undergo absorption. If abdominal and the foetus dies at term it undergoes calcification, mummification or suppuration.

It must ever be born in mind that intra and extra-uterine pregnancies may co-exist.

History of a former ectopic gestation in a suspected case is of importance, as the literature of the subject contains the report of many cases of repeated tubal pregnancies.

The diagnosis is not always an easy matter. In suspected cases a careful examination is to be made. The manipulation must be gentle as rupture of the sac or haemorrhage, and both are easily produced, may cause a serious complication or even death.

Intra-uterine exploration with finger, sound or curette is not indicated, frightful haemorrhage having been produced in this manner. The probable diagnosis must be made upon the usual subjective symptoms of early pregnancy and the finding of a spherical or egg shaped mass, soft under pressure, but not fluctuating as in the case of pyosalpinx, cyst or hydrosalpinx.

The usual changes are to be noted about the uterus and vagina.

Unfortunately diagnosis before rupture is rare; usually the physician is not consulted until rupture has taken place.

Here the history of sudden

lacerating pain and collapse patient pallid, with small weak pulse, or hunger and cold sweat tell the story of severe bleeding.

Examination will reveal abdominal distention, extreme tenderness in the hypogastric region and dullness in the flanks.

Bimanual examination must be made, with care, as roughness may excite additional haemorrhage, to determine whether the rupture has taken place into the folds of the broad ligament or into the abdominal cavity.

A soft mass in the cul-de-sac of Douglas, with uterine antersion, indicates free haemorrhage, while a lateral soft mass without involment of Douglas' space means a confined haemorrhage.

Confined haemorrhage may be divided as follows:—

1st—Tubal, including the connective tissue adjacent.

2nd—Gestation sac.

3rd—Broad Ligament.

Fortunately the confined haemorrhages are more common than free bleeding into the abdominal cavity.

Haemorrhage into the tube is usually easy of diagnosis. A hard firm mass, not tender on pressure, is to be found in the normal site of the tube. Such a condition following the usual subjective and objective symptoms of tubal rupture enables a positive diagnosis.

When the haemorrhage is into the gestation sac, a very prominent tumor is palpable, unless it be one of the rare cases wherein the implantation has taken place in a rudimentary

uterine horn, oblong in shape, with attachment to uterus through remaining portion of tube which feels practically normal.

When the blood escapes into the folds of the broad ligament the tumor mass is to be found lateral to the uterus and this organ displaced toward the opposite side of the pelvis.

Some cases have been reported wherein the haemorrhage has been so extensive as to dissect up the peritoneum and thus show a baggy mass completely surrounding the uterus, but in our series this has not been observed.

Some authors place stress on softening and bluish discoloration of the vagina, but this seems to us to be rather misleading as rupture usually takes place prior to the twelfth week and the changes in this particular are not marked enough to be of value.

We wish to again emphasize the importance of an expulsion of decidua in a woman who has been normal in menstruation for a considerable length of time. This decidua is usually expelled in large masses, two or more, by positive labor pains and can be recognized by its great thickness; expelled decidua is usually retained by the family of patient for examination, the fleshy appearance causing them to believe an abortion has taken place.

If the history of the patient and the decidua are not sufficient for diagnosis a microscopic examination will reveal the chorionic villi and complete the diag-

nosis.

It must always be borne in mind that in about thirty per cent of all cases there is no discharge of blood or decidua, the first symptoms being the sudden severe pain and shock.

Rupture sometimes occurs as early as the third week and a diagnosis of membranous dysmenorrhea has been known when rupture occurred at the time of a regular period.

It is in these cases of early rupture that diagnosis is most difficult. While the symptoms are the same as in later ruptures, only in a less degree, they are not so alarming as the haemorrhage is not sufficient to produce extreme shock. Here we usually have repeated attacks of abdominal pain, vertigo and nausea, with external haemorrhage of a more pronounced type than the normal menstrual flow.

Careful bimanual examination will reveal the tumor, usually tubal. If the case is under observation for repeated examinations the tumor mass will be found to increase in size after each paroxysm and at operation the haematoma observed to consist of stratified clot.

As there is no positive sign of foetal life in the early months it is well to err on the side of safety and regard all cases as dangerous and liable at all times to secondary rupture, with perhaps fatal issue.

The diagnosis after the fourth month is comparatively easy, as the foetal parts are outlined distinctly when the examination is made. Should the ges-

tation sac be too tense to permit outlining the foetus a radiograph should be made.

The differential diagnosis must be made between appendicitis, uterine abortion, perforation, tumors, hydrosalpinx, pyosalpinx and combined extra and intra-uterine pregnancy.

In appendicitis tenderness is found at McBurney's point; there is an absence of any of the usual subjective symptoms of pregnancy; examination will reveal a normal condition of vagina, uterus, tubes and ovaries. Our observations cause us to believe the most important point in differentiation is the tenderness of the sympathetic ganglia situated about one inch to either side and one inch below the umbilicus. If tenderness is elicited at this point on the right side the appendix is involved; if on the left side the uterus and oviducts have been involved in an inflammatory process and an abnormal pregnancy suspected as the cause of prostration. Pallor, absence of fever and collapse also point to a ruptured tubal pregnancy.

In uterine abortion the pains are not severe and but little shock is to be noticed even though the bleeding has been extensive. The history is that of a gradual beginning as in normal labor and total absence of the very acute pain and collapse of rupture.

Examination will demonstrate the presence of a tumor external to the uterine cavity.

In perforation, air hunger and extreme pallor are absent.

These patients are not anaemic and present the anxious expression of peritonitis. Unless the perforation be that of a ruptured pyosalpinx the uterus and oviducts will be found in a normal condition.

Small tumors, corresponding in size to that of a suspected gestation sac, may cause an error in diagnosis when found at an examination following a possible intra-uterine abortion.

As the majority of tumors are of much slower growth the patient will usually give a history of pain and distress in the tumor antedating the pregnancy many weeks or months.

The gestation sac is not tender while the majority of tumors are. The sac is soft and yielding, while tumors are firm.

Cystic tumors fluctuate and the gestation sac does not.

In hydrosalpinx fluctuation is easy to obtain.

In pyosalpinx tenderness, hardness, fever and involvement of the opposite side will serve to clear up the question.

In combined intra and extra-uterine pregnancy the diagnosis is at times difficult. The most valuable sign is that of uterine enlargement. In extra uterine pregnancy the enlargement is not, as a rule, so great as in normal pregnancy and the softening and discoloration of the vagina not so noticeable.

Given a case in which the changes are normal and a tubal or other tumor presenting all the physical characteristics of the gestation sac is found it is the part of the wisdom to handle the

case as one of combined pregnancy.

Some authors place stress on the differential diagnosis between retro-uterine gestation sac and retro-uterine hematocile and retroflexion of the uterus. It would seem such an error in diagnosis should not occur, as in either case the uterus is clearly demonstrable anterior to the tumor mass. Such an error, should an attempt be made to correct the supposed retroflexion, would produce, possibly, fatal haemorrhage.

The question of treatment is not one hard to decide as operation is indicated in all cases. Just when to operate is the point in dispute.

Personally we do not believe it wise to operate during the stage of profound shock. This should be treated along the usual lines and the patient placed on the table after reaction.

If a diagnosis is made prior to rupture, which is quite rare, the patient should be urged to consent to immediate interferences as this is the ideal stage for operation.

Doubtless we hope all observed cases wherein rupture has taken place, with death of the foetus, either at time of rupture or at term after destruction of the foetal circulation, with no very serious result to our patient but these are extremely rare. We recall one of our early cases when a physician was not called at time of rupture and we saw the case for operation after the foetus had undergone partial saponification. Here a secondary

abdominal pregnancy had taken place, and aid was asked for only after the death of the foetus of term. The technic is as usual for work upon the pelvic viscera. A median incision for thorough exposure of the field and removal of the abnormal contents.

As repeated, tubal pregnancies have been reported, the opposite tube and ovary should be carefully examined and removed if not normal.

If the opposite tube is allowed to remain, the patient should be instructed as to the percentage of chance for a like condition at a future date and urged to submit to frequent examinations if again pregnant.

On one of our series wherein the opposite tube, apparently normal, was allowed to remain, the patient died about two years later as a result of free haemorrhage caused by pregnancy and rupture of the remaining tube. Others of our series have been delivered at full term without complication.

Should the placenta be firmly adherent to the pelvic floor it is part of good surgery not to attempt its removal as frightful haemorrhage might result. Drainage is not necessary even though the placenta be allowed to remain.

Should there be evidence of a recent inflammatory process and drainage indicated this should be accomplished through the vagina and the abdominal wound closed as in non-septic conditions.

Read at the meeting of the New Mexico Medical Society Roswell N. M.

BOOKS REVIEWED

A PRACTICAL STUDY OF MALARIA. By William H. Deaderick, M. D., Member American Society of Tropical Medicine; Fellow London Society of Tropical Medicine and Hygiene. Octavo of 402 pages, illustrated. W. B. Saunders Company, 1909. Philadelphia and London.

Without undue flourish the author set forth the generally accepted theories regarding the origin, prophylaxis and treatment of malaria. He describes a parthenogenetic cycle of the plasmodium malariae; he follows the observation and deductions of Schaudin in regard to a probable parthenogenesis of certain macrogametes and is inclined to disagree with Craig. He believes the so-named parthenogametes to be true macrogametes.

Deaderick steps from the usual highway of writers on malaria; he recognizes the fact that not in every case of malaria the parasite can be demonstrated at the first examination; he confesses to 50 per cent of failures and quotes good authorities who have no better result.

It makes an old hand at malaria-work feel good to see a man who masters the subject leaving thus the forced channels of the conventional text books and dicta of the professor's chair and state the experience of the most keen and practical students.

The chapters of prophylaxis and treatment are full of merit. Here also the author is open and does not condemn the use of

quinin in hemoglobulinuric fever. The reviewer has seen decided benefit from quinin, if properly used at the right time.

The writer has omitted one phase met with occasionally: malarial hematemesis similar to the black vomit of yellow fever.

Speaking about the intravenous application of quinin the author sees no advantage over the intramuscular administration. There are several advantages. In some cachetic subjects the intramuscular administration will produce no result while the intravenous will. The action of intravenously given drugs is instant and sure. Intramuscular injections are often very painful and sometimes swellings result which induce the patient to object against a repetition, while the intravenous administration, if properly done, is practically painless. Altogether the work appeals by reason of its succinctness and yet clearness.

THIRD REPORT OF THE WELCOME RESEARCH LABORATORIES. Gordon Memorial College, Khartoum; Toga Publishing Co., New York.

These reports are a valuable source of information on various subjects: trade products, zoology, botany ethnology, medicine &c. As far as medicine is concerned this report is a marked advance in Tropical Medicine. The trypan somiases of different animals are thoroughly considered and beautifully illustrated. The chapters on rham-

phiothis and spirochetosis open a new panorama to the every day practitioner who has no chance to enter actively into the arena of research.

The Vienna scientist, Dr. Franz Werner, gives a well illustrated compend on the poisonous snakes of the Sudan. The part on entomology is a treasure of information.

Of great interest is the description of the healing art as practiced by the Dervishes and in Kuordofan. Many instruments are practical, the splints are ingenious. The operations for circumcision in male and female are unique, while we all are acquainted with the performance a detailed description of how the "thorn-suture" is applied to the prepuce is rather novel.

Our continent offers alike chances for research and no doubt will be found when the opportunity arises.

GENITO-URINARY DISEASES AND SYPHILIS. By Edgar G. Ballenger, M. D. Lecturer on Genito-Urinary Diseases Syphilis and Urinalysis, Atlanta School of Medicine—Editor Journal-Record of Medicine — Genito-Urinary Surgeon to Presbyterian Hospital. With 86 illustrations 276 pages.

E. W. Allen & Co., Publishers, Atlanta, Ga.

The author attempted—and succeeded—in reaching a medium between the bulky textbook and the meagre compend. The book will prove of value to the practitioner who desires a concise

work on the subject. Every page contains some item of interest.

One part alone will prove of untold value namely if the author's method of abortive treatment of gonorrhea can be carried out also by others. Ballenger claims to be able to cure gonorrhea in 3 or 4 days.

The chapters on prostatic enlargement and muscular injections of mercury are up-to-date.

The author is original in several ways and undertook to make his book interesting and instructive.

THE PHYSICIAN'S POCKET ACCOUNT BOOK. By J. J. Taylor, M. D., bound in full leather. Price \$1 per copy: published by The Medical Council, 4105 Walnut St., Phila. Pa.

This book is without a doubt a complete and at the same time simple and efficient account book. It is absolutely legal and can be presented in any court of justice. It does not make use of any signs, but everything is entered in plain language, and any judge can understand it.

The book contains Business instructions for physicians, which may be found useful under the headings of "Importance of a due bill," "Fees," "Billing and collectors," "Cautions," "Statute of limitations," "Form for wills," "Dying declarations," "Saving and investing."

This book has the advantage that entries can be made right upon the spot, thus insuring that none will be omitted on account

of procrastination. The book being always in the physician's pocket, it is always up-to-date, and when he meets a debtor or the road who inquires about his account, he can inform him at a moment's notice.

DISEASES OF THE SKIN AND THE ERUPTIVE FEVERS. By Jay Frank Schamberg, M. D., Professor of Dermatology and Infectious Eruptive Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine. Octavo of 534 pages, illustrated. Philadelphia and London: W. B. Saunders Company.

This book is a treatise which embodies the essentials of dermatology not only within the strict meaning of the word but considers in a short manner all manifestations of and all the human integument. Even the rarer tropical diseases find sufficient space. The value of this little book is its helpfulness in all conditions of abnormal appearance of the skin, having a tropical chapter on actionotherapy. X-ray, radium and otherwise is, excellent.

NEWS

Dr. Peters, in Silver City, has to build additions to his present accommodations.

The little son of Dr. C. M. Yater, Max, is just recovering from quite an attack of pneumonia.

Dr. C. A. Taylor-Goodman has been appointed delegate to the United States Pharmacopeal convention.

The annual banquet of the Chaves County Medical society was held on the night of the 13th, inst. A pleasant time was given all present.

That a copy of this resolution be sent to the Journal of the American Medical association, and to the Journal of the New Mexico Medical society.

The following resolution passed at a recent meeting of the Las Vegas Medical society expresses its opinion regarding representation in the coming Pharmacopeal convention:

C. L. Parsons, an osteopath of Roswell, was indicted by the recent grand jury for illegally practicing medicine and upon trial was convicted and fined \$50.00 and costs. It is said he will appeal the case to the supreme court.

The Las Vegas Medical society elected the following officers: President, H. Goeltz; first vice-president, F. T. B. Fest; second vice-president, C. Losey; secretary W. E. Kaser; treasurer, H. J. Muller; censor, W. R. Tipton; delegates, E. B. Shaw, W. E. Kaser.

Resolved, That it is the sense of the Las Vegas Medical society that the representation of the American Medical association and its component parts in the convention to be held for the revision of the United States pharmacopeia be left to the Council of Pharmacy, and,

At the December meeting of the Chaves County Medical society, the following members were elected officers for the term of 1910: President, Dr. E. M. Fisher; vice president, Dr. Chas. F. Beeson; secretary-treasurer, Dr. C. M. Yater, re-elected. Board of censors for three years: Dr. C. F. Beeson, re-elected; delegate, Dr. R. L. Bradley.

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EDITORIAL

THE PRESENT PHASE OF THE QUESTION OF THE TUBERCLE BACILLUS IN THE CIRCULATION.

Some original work along these lines was done in New Mexico and this fact may serve as an excuse for following up the developments of this question and reporting same regularly. Since Nature made this section a health resort for tuberculosis, most of us have more to do with tuberculosis than the average practitioner elsewhere and our interest in tuberculosis therefore is very strong.

We shall confine ourselves to work done on this hemisphere because on the other side of the water the question is pretty well settled, but Rosenberger's work was the first to call universal attention to the importance of the TB in the circulation.

It is here like with other discoveries; they must be discovered over again.

The Editorial Ukase of the J. A. M. A. did not settle the question at all and the Editorial Dictum did not work. The horizon of the editor seems to have been limited to the light thrown upon the matter in the J. A. M. A. There seems to be an aversion to review what is published in smaller journals. This is natural, since the J. A. M. A. tries to monopolize the medical market by making reviews handy for the small journals by sending abstracts of what they publish. Why should a state journal rehash what was read already by everybody who belongs to the A. M. A.? *Is it just to have the J. A. M. A. appear as sole source of all medical knowledge?*

In the meantime the pending question was decided. However not in the reclining chair of any editor, but by actual work. Will the J. A. M. A. give now to the readers the full benefit of a thorough review?

Verily it seems strange,—not to use a stronger term,—and it can be but futilitarian pursuit to pick up a few stray reports, each on a limited number of cases of which the sum total of all these negative reports amounts to not one-sixth, or even less, of the positive results reported.

It is well enough to take up a certain line of research work and experiment and publish one's failure. But we fail to see how such failures published can influence in any way demonstrated facts.

In work as delicate as the search for TB in the blood the slightest variation in technique brings failure.

It can not be expected that Rosenberger would simply accept an editorial critic of his many cases as final. He had something to say and in his reply in the New York Medical Journal showed sound logic. He referred to contaminated

hands and faulty technique. In every-day language: unclean fingers or unclean water.

Rosenberger makes one statement which ought to be framed and hung up in many places. "*Such work is not for the man who 'wants to come into the laboratory and do a little work,' but for the well trained bacteriologists.*"

It is a great mistake to believe that a well-equipped laboratory is the essential of good work. Much research work has been done with makeshifts and great discoveries have been made while working, what we would consider today "under difficulties".

How can distilled water be clean and at the same time contaminated? It is absurd to call water "distilled" if alive with acid-fast microorganism. We fail to see why such water is used at all.

To go back to the Ukase. Ravenel and Smith are largely responsible for the Ukase because their article was reproduced in the J. A. M. A. They reported negative in 18 cases against Rosenberger's many. As said before, ordinarily one would have hesitated before making 18 negative findings a basis of contradiction. Smith went to Philadelphia, worked there according to the directions of Rosenberger and *found what he considered to be TB and that without a doubt*, (Military Surgeon, January, 1910).

Burville-Holmes' article was ventilated in the former issue; unwillingly he confirmed Liebermeister, Schnitter, Rosenberger, Fest and others.

A very valuable contribution appeared since by Foster, Jr., of the M. R. Corps. He reports personal and other work and reviews the most of the work done until August, 1909. T. B. were found in the circulating blood in the Long Island Hospital, the U. S. Army Hospital at Fort Totten, the French, Riverside and Bellevue Hospitals of New York and in the Research Laboratory of the N. Y. Department of Health.

Foster does not believe tuberculosis to be a bacteremia in the ordinary interpretation of the term. He believes the technique of demonstrating the TB in the circulation too tedious for routine procedure. He makes a statement according to which tuberculosis is a bacteremia in the true meaning of the word, namely: "*I do believe, however, that a more or less constant accidental invasion of the blood by tubercle bacilli occurs in all forms of advanced tuberculosis.*"

We refer to Fest, Improved Methods for the Examination of Sputum and Blood in Relation with Tuberculosis and former editorials.

The outcome promises to be of greatest importance to the phthisiologist after we shall have passed beyond the simple fact that the TB circulates as a rule in the blood of tuberculars and after we shall have acquired certain knowledge as to variations in number and in morphology and their relation to prognosis and treatment.

Since writing the above an article appeared in the Journal of the American Medical Association collectively from the pens of McFarland, Burville-Holmes, Beardsley and Case. They call their paper a "refutation" of the Rosenberger theory, namely, that tuberculosis is a bacteremia.

The article appears rather late in the day, after the question seemed settled and shows again that the United States need another Medical Journal.

The writers acknowledge what they first denied, TB is demonstrated frequently in the circulation. This refutation is therefore a partial acknowledgment.

A new series of inoculation experiments was undertaken to disprove Rosenberger's former work about the occurrence of TB in the feces and while the experimenters failed to discover the TB in the feces of the inoculated animals they found same promptly in the urine. *Ergo: the animals presented a bacteremia for a time. The fact that the experimenters examined the blood of the inoculated animals and failed to find the TB in any case does not alter the undeniable fact of the TB having been there.*

In their polemic they forget entirely what has been said and demonstrated about TB in the urine and fetal circulation. Unless these important facts can be explained in a satisfactory manner, other than by bacteremia, the sum total of their arguments is without any foundation.

The refutation assumes the official brand "Phipps-Institute". We hope for the sake of science that when the final report is made it does not appear as exclusively "American" produce. It happens that tuberculosis abroad is the same as here; at any rate we supposed so and it being a bacteremia abroad we naturally supposed it was the same here. But we are open to correction.

The writers quote Burville-Holmes finding at the Bryn Mar Hospital, TB in all of the examined cases, they confess that this finding was rather perplexing and find only one solution: contaminated water.

It is timely to ask some pertinent questions:—

A transient bacteremia being now proven by McFarland, Burville-Holmes and others in inoculated animals, why must not the same tubercular bacteremia exist in the afflicted with a permanent focus in lung or elsewhere?

Why, knowing that the TB existed in the blood of animals they used in their experiments, and being unable to demonstrate same, not accept the most rational conclusion that the TB existed also in the human objects of their experiments and that they were, by accident or other reason, unable to find same?

With contaminated water acid-fast bacilli were found in the blood; have experiments been made with the blood of the same individuals using pure water?

Was the contamination of the water discovered before or after making the stains?

How did these acid-fast bacilli enter into the distilled water? Why are the acid-fast bacilli found in the blood of tubercular not true tubercle bacilli; if not what are they?

FRANCIS T. B. FEST.

NEW MEXICO TROUBLES AND NEW MEXICO WORRIES.

A new governor will soon fill the executive chair of this Territory and we naturally wonder what may be in store for the Medical Profession of New Mexico. We do not complain, we do not criticise. There was a difference of opinion. The soldier does not view matters from the standpoint of the professional man; yet he may act on good faith.

The new governor is a university man and a prominent member of the Bar Association. He, therefore, will view the organized medical profession as a sister organization akin to the organized legal profession. He knows that the profession organizes for the betterment of her constituents. Elevating the standard of any profession means benefitting her clientele. As in law so it is in medicine. A man with aspirations and ambition,—and who is without either, and progressive?—cannot but associate with his colleagues. Only by coming together, working together, by mutual exchange of experiences, discussing ways and means for doing the best for the greatest number can we learn and teach. The man who isolates himself is, only in very rare cases, of average ability. The new executive understands this and therefore, when the medical profession meets again a committee sent to present and explain needed reforms in legislation to those in power, will not have to report that they were utterly ignored, and enter a protest against such treatment. We hope that never, in the history of New Mexico medicine, will the organized *body* be compelled to file a protest. For years the medical profession had struggled for recognition in the appointment of the Territorial Board of Health. The struggle was to abolish the system by which these appointments were made, on the recommendation of some influential politician or for personal reasons. The office is too important. The profession alone, by reason of personal contact and work, knows the value and ability of her members and who is best qualified for such office.

The law which gave the profession a voice in the appointment of the Board of Health was first ignored absolutely, then abolished and rightly so, because it is better to have no law than a dead law.

This must not be considered a protest against the personnel of the present board unless there be a man appointed against the direct protest of the profession of a certain locality. The desire is not to dictate, but to have the privilege of informing the executive of a number of men who are able to fill the office to the greatest advantage of all. It is a question of public welfare where personal or political considerations must not be considered. We earnestly hope that the period of chronic medical legislation has passed away for good. If reform be needed and a legislative committee is again sent to consult with the executive and legislative bodies of the Territory, we trust that such representatives will be treated as representing the Medical Profession of the whole Territory as part of the great National Organization.

C. M. YATER,

Member Legislative Committee
New Mexico Medical Society.

THE CHICAGO MEDICAL SOCIETY TAKES OFFICIAL ACTION UPON A. M. A. REFORMS.

Resolutions Adopted January 11, 1910.

WHEREAS, The Chicago Medical Society is an integral part of a constituent society of the American Medical Association, and therefore vitally interested in the welfare of that great organization; and

WHEREAS, Certain conditions exist which menace the best interests of the members of the American Medical Association, and of the profession at large; therefore, be it

Resolved, That the Chicago Medical Society in council assembled recommends the following changes in the policies and management of the American Medical Association, viz.:

1. The laws should be so amended that no one person will be permitted to hold, at the same time, more than one executive or honorary office in the association.

2. The office of general secretary, and the positions of editor and manager should be separated, and no person should be permitted to fill more than one of these places at one time.

3. The offices of editor and secretary should be filled only by men educated in regular scientific medicine and of unimpeachable professional records.

4. The number of trustees should be increased.

5. All officers and employees whose duties involve financial responsibility should be bonded.

6. The laws governing admission to membership in the American Medical Association should be so amended as to make it mandatory upon the secretary to enroll applicants who have complied with the provisions of the by-laws governing the same.

7. Space should be set apart in the journal for free and courteous discussion of the policies and methods of the association, or for any other matters which may appeal to the membership at large as bearing upon the interests of the association.

8. Provision should be made for the initiative and referendum.

9. No member should be expelled from the association without a fair trial and full hearing.

10. No person who is a general officer or member of the House of Delegates or Board of Trustees or employee of the American Medical Association shall be eligible to serve as a general officer or member of the House of Delegates or Council of any constituent association.

11. *Be it further resolved*, That the secretary of the Chicago Medical Society be instructed to publish these resolutions in full in the Bulletin of the society, and to transmit a copy of the same to the *Journal of the American Medical Association* and to the editors of the various State journals.

Some reflections are allowed without demonstrating disloyalty to the great A. M. A. When G. Frank Lydston last year made himself heard those who knew about it sat up and took note. Comparatively few had opportunity

to follow the controversy. One thing is sure, Lydston while a reformer is not disloyal, he placed his fingers upon sore spots. He stood alone and the A. M. A. meeting passed by without reform.

How will it be this year? Only one organized medical body excels in strength the Chicago Society, New York. Organized Medicine in Chicago, by adopting the above resolutions, unequivocally and clearly took a stand, a stand which the independent Medical Press of America has demanded for years: reform in the A. M. A. bureaucracy.

Chicago Medicine took the lead, others will follow. Chicago's organized Medicine is strong, too strong to be silenced and cannot afford to lay down after taking such a stand.

The question for us is: Are the indicated reforms necessary? If they are, then there is only one road to follow, approve what is right.

FEST.

PUBLIC HEALTH EDUCATION—THE LAYMAN'S MEDICAL JOURNAL.

We have entered into a new stage of the work for the improvement of the human race. "PUBLIC HEALTH EDUCATION" has become our motto. No doubt, much good can be done and will be done and indeed, the public needs education in health matters.

Yet this very movement, necessary as it is, may be felt a two-edged sword. There is danger that superstition and errors be inoculated into the public, perhaps in some instances more so than before.

Is the medical brotherhood free of superstition? No, by no means. Just get on a transcontinental train. Just watch for the altitudes. Just watch the old lady exchange her "Book of Prayer" for a tempting flask and take a dram or two! Why, because her family physician has warned her about the altitudes and recommended stimulation. No doubt stimulation on a transcontinental trip is a pleasant but not urgent intermezzo. This bugbear "altitude" is an inexplicable superstition of American Medicine. Who thinks in Europe or Asia of advising or warning a healthy person with a healthy heart about the dangers of "altitude"?

Just watch for the thousands of consumptives who kill themselves because they were told by their doctor to "rough it."

Just watch for the multitude which succumbs because in spite of having the means to go to a proper climate succumb at home because they were told that climate does not cure consumption. Is it not an error not to send the well-to-do tubercular to a suitable climate in a suitable altitude?

One late attempt of public health education is the Layman's Medical Journal, published by the Wisconsin Medical Woman's Association. We hailed its appearance with pleasure, we were ready to shake hands with the editor. But, while approving of the plan in general, while endorsing the underlying principle, we protest most decidedly against the dissemination of errors and wrong knowledge. The second issue is just such an attempt of inoculation of error into the public as we pointed out.

It is well to teach the consumptive to live outdoors and strengthen his

belief of getting well at home; but it is wrong, it is an error, it is want of knowledge, it is often inhumane, to teach the layman that climate is ineffective in tuberculosis.

Many die in suitable climates who would be better off at home. This is not the fault of the climate, but error of judgment of those who keep the incipient at home and send the advanced case out to die. Many a poor victim is turned loose upon us whose tombstone will be a monument to ignorance. Climate cannot perform miracles.

It is our duty to teach the public that consumption can be cured everywhere. But it is wrong to withhold the knowledge that climate in many cases is a large part of the cure and the more early the change takes place the more early the cure will be, far sooner than at home.

The article, "Does Climate Cure Consumption?" is misleading and absolutely wrong because it is wanting in any and all scientific foundation.

While the consumptive ought to find a sanatorium open for him wherever he happens to be, he ought to be informed also that nature has provided suitable climates. Science the world over has recognized the influence of climate and altitude and does so more and more. The unfortunate poor has to stay at home and make the best of it, and very often does it successfully, but it is as absurd to deny the benefit of a change to New Mexico or Colorado as it would be absurd to decry the influence of Hot Springs, Wiesbaden, Carlsbad, Nauheim and all the watering places in the world. They are out of reach for many, but it is unwise to say that they have no therapeutic value.

Different is the attempt in the "World's Work" to educate the layman about the "Land-of-the-Well" and the ways to health. This attempt of public health education is so proper, the experience so truthful that we find space for a large abstract of it.

FEST.

THE CONSUMPTIVE'S HOLY GRAIL.

Such is the title of an article in a recent edition of *The World's Work* which article deserves our attention. The author, whoever he may be, knows the situation, he got well himself and makes the reader acquainted with his experience. He calls New Mexico the "*Land-of-the-Well Country*."

The article is timely, appearing at a date when the organized profession endeavors to work with the public for dissemination of knowledge.

We reproduce some sections of the article because it contains the answer to many questions frequently asked by the laymen.

"The country in the Southwest to which health-seekers go is a vast one, though it is not nearly so extensive as it once was, or as it is still believed to be by many in the East. A decade ago Colorado was considered the best of all places to go, with California probably second on the list—while "anywhere in the West" was considered good enough. Gradually, a costly experience has pretty accurately marked off the country that is most desirable, so that it is now possible to say something definite and certain."

How the author describes a district which takes in all of New Mexico and Southern Colorado and says about it:

"All over this great circle, and even beyond it, we may find 'health-seekers,' but generally those who are near the outskirts are persons who have become accustomed to living and working in the mild climate and who are making the country their home.

Nearer the centre of the circle lies the great broad tableland where the business of actively curing the disease is carried on more extensively and more successfully than anywhere else in the world. And it is this section which, as time goes on, is likely to become better and better known as "The Land-of-the-Well Country." Here is a large territory where are to be found the most nearly ideal conditions of dry air, sunshine, altitude, and warm weather. In these factors, which are the fundamental desiderata in the cure of tuberculosis, this section excels Colorado as much as Colorado excels New York or Massachusetts.

The climatic conditions have made this great section one vast sanatorium. Persons who are dying with tuberculosis in the East quickly respond to this wonderfully mild and soothing climate; and with scientific treatment most of them ultimately get well, or at least very much better. That this is not a reckless statement has been scientifically demonstrated by the work of the famous sanatoria in this country. The actual results of one of them, covering a period of eight years and including several hundred patients, show that—among those who went before their disease became advanced—none died, 30 per cent. improved, and 70 per cent. were cured.

It is a matter of climate which attracts the health-seeker to this country, and he is of course very properly interested in it. I suppose that the consumptive who reads this will be asking for advice whether he should go in search of climate or remain and follow the cure in his own country. A proper answer to such a question is very hard to give. So much depends on the individual case, and the particular circumstances of each, that it is impossible to lay down any general rule whether all should emigrate to the new land or not.

But, after all, my advice to all those who can go is to do so. I am wiser than when I started out for this country, and have lost many of the delusions with which I started. One of the things I have learned is that climate is not a specific for tuberculosis; it is not a cure-all, and will not work miracles. I know also that cures are being made every day in all parts of the East—which is something that I did not know before, and could hardly have believed in face of the insistent advice of doctors and other persons to 'go West.' But there is absolutely no doubt—in spite of any arguments to the contrary—that a land with a climate like this offers a surer and quicker and much happier road to health than can be found anywhere else.

The peculiar climatic conditions are due, of course, to the physical character of the land and to its remoteness from the sea. Nature has set up a series of great mountain barriers to the West, which keep off all the rains from the Pacific. What little rain the country gets comes during a couple of months in mid-summer, when the prevailing winds blow from the South. For ten

months of the year practically no rain falls, the total annual rainfall varying from eight to twelve inches, as compared with from forty to fifty or more inches in the East. The absence of rain produces a twofold effect—an almost cloudless sky, so that the sunshine is practically constant, and an exceedingly dry atmosphere. The air is so dry that one feels its peculiar parching effect in his nose and throat for weeks after his arrival; while the sunshine seems to bathe everything in a flood of mellow gold.

There is, in addition, the important factor of altitude. The whole country slopes from north to south with a general altitude of from 4,000 to 6,000 feet. It is the constant sunshine balanced over against the altitude which produces such an equable climate, for the summers and winters are very nearly alike in these mountain regions. Where the altitude falls below 4,000 feet, this climatic balance is not so marked. Such places as El Paso, whose altitude is 3,700 feet; or Tucson, with 2,400 feet; or Phoenix, with 1,100 feet, though they are ideal for nine or ten months in the year, are too hot during the summer for the best results.

HALF THE PEOPLE ARE HEALTH-SEEKERS.

One cannot be in the Southwest for any length of time without realizing that the impress and the influence of the health-seeker are everywhere. It is estimated that there are 50,000 tubercular invalids in Colorado, New Mexico, and Arizona; and though it is impossible ever to know the number with any degree of accuracy, I believe that the estimate is too small. It is a fact that all of the towns and cities are filled almost to overflowing. If the health-seekers and their families were to leave, the country would probably lose more than half of its population. A large part of the business of the land consists in supplying the needs of these people, providing boarding-houses and institutions where they may live, as well as stores and shops where they may get the ordinary necessities of life.

There are three well-known alternatives for the health-seeker in this country: the sanatorium, the boarding-house, and the ranch; and I propose to say something of each in turn. My own experience was gained chiefly in a sanatorium."

The author describes several sanatoria and states the rates, calling attention to the fact that there are practically no charitable institutions in the Southwest. The rates in better institutions amount up to \$25 per week.

"But most of the institutions of the Southwest are purely private, and are run as business ventures. They are none the less excellent, and this fact is to be taken as indicative only of the favorableness of the locality for the curing of the disease.

THE SANATORIUM IS THE GRAIL.

When I went to live in one of these institutions, I found the actual situation much different from what I had supposed it to be. I expected to go to a hospital where I would find sickly looking people who would make life miserable by their incessant, heart-breaking coughing. In fact, I had gone

purely as an experiment, because I had proved to myself that I was not capable of working out my own case; I intended to stay but a month or so, and then move on. How I changed my mind and determined to fight it out to the end has already been told in 'How I Got Well.'

I found that the patients did so little coughing that I wondered whether they had any trouble whatever—until I learned that any patient's cough will very much decrease if he strictly follow the rest-cure. In appearance, they were more healthy looking than the average person in ordinary life. All of them seemed happy and contented, and I wondered even more, until I found the reason—they were getting well and they knew it. There were men and women varying in ages from twenty to forty—though one man over fifty years of age left the sanatorium cured while I was there—and they came from all parts of the country. The feeling of being in a hospital disappeared after the first day, for there was nothing to foster it, and everything to counteract it. Every patient had a cottage of his own, and the continuous life in the open air made one feel as if he were camping out, with all wants cared for.

The idea of the sanatorium includes a complete isolation from all the cares and burdens of ordinary life, so that the patient may devote his entire time to the seeking of his cure. Continuous life in the mild out-of-doors is required. Absolute rest, most of the time spent on one's back, is strictly enforced; and this change in mode of life is a revelation to the invalid who has been accustomed to follow the bent of his nervous inclination, whether it be in climbing mountains or riding horseback. One is not even allowed to walk an extra step if he has fever, and usually such a patient is put to bed until it is gone.

In the matter of food, the patient is allowed all that he can eat of the most nutritious varieties, chiefly meat, milk, and raw eggs. Most of the patients were fed six times daily, and the results of the forced feeding would become strikingly apparent in the gain of a couple of pounds or more in weight at the end of the week. Everything was designed for the comfort, and everything done in the most careful and scientific manner; if, considering his condition, one may be happy in any place this side of eternity, it is in such a place as this.

There are, of course, many persons who cannot go to a sanatorium. If they could in some way learn the lesson which the sanatorium teaches, I believe that most of them would get well. It is the enforcement of the routine—life in the open air all the time; absolute, continuous rest; the very best of food, and as much of it as possible—together with the scientific care of the sanatorium which makes it valuable. All these things the patient could get in his own home—possibly; but the cold fact is that he never does get them. It is his ignorance, his lack of sense, his entire lack of experience in the matter of proper treatment, which makes the case of the average patient in his own home so hopeless as it is. And just so it is his increased knowledge and experience which come from life in the sanatorium which will cheer him up as he sees his cure approaching closer every day.

I have been appalled in my journey through this country by the lack of sense and the refusal to profit by the experience of others, which is shown by the health-seeker. He refuses absolutely to consider himself a sick man, and this is his big mistake. He persists in the notion that he can live the life of the ordinary gad-about tourist, and that the climate will in some way make him well; or he starves himself from both food and fresh air in the dismal environment of the ordinary boarding-house, and then curses the climate and the world in general. The truth is that the majority of these people fail because they have gone about their cure in the wrong way. By the life which they lead they make it impossible for the climate to do them any good; they destroy the recuperative power which they would have if they lived in the right manner.

THE BOARDING-HOUSE A FALSE BEACON.

I spent several months in boarding-houses, and know the life that is led in them, and the results which it produces. All of the resort towns in the Southwest are filled with boarding-houses, and in the winter the boarding-houses are full of 'lungers.' They flock to such towns as Santa Fe, Albuquerque, Silver City, El Paso, Phoenix, and Tucson, literally by the thousands, and in those towns one sees them constantly, everywhere; in Denver, where they were proverbially thick a few years ago, one scarcely sees them at all—though, of course, there are many of them in the city. It is useless to describe these boarding-houses, for boarding-houses are the same throughout the world—some good, some very bad; most are indifferent. All of them are more or less dingy and poorly provided with comforts, even for a well man. And in this country, the Southwest, where everybody is abominably fed, the boarding-house is correspondingly poor. As long as a person is able to take care of himself, he is welcome; it is only the sick man who finds it hard to get a place. Charity is largely a matter of viewpoint. If one tries to take a sick man on a stretcher into a boarding-house in the East, or one who by his looks and his incessant coughing proclaims his feared disease, he will hardly be received with open arms. And if we remember how many times that very thing is tried in such a city as Denver, we can hardly censure coldness and a lack of charity.

As a matter of fact, the sick consumptive is not wanted; he is feared, and very properly so, in the average case, for he makes no pretense of following even the simplest of sanitary rules. And why should any one be compelled even by charity to take him in? Such a person should remember that he makes extra work and extra trouble; and especially, that where he goes well people will not go. He has a sorrowful time of it, certainly, but he has no right to inflict his sorrow on those about him. He should bear these things in mind, and consider that he makes misery enough as it is; above all, he should be cheerful and not a crank. I still have a vivid recollection of the hopeless, gloomy days that followed one another in my own case, and how hard it was to keep a brave face. But I tried hard to fight like a man should fight, and on one of the gloomiest days I copied this from the 'Last Days of Pompeii' (which I was reading), on the fly-leaf of my memo-book:

'There is but one Philosophy, though there are a thousand schools—and its name is Fortitude.' And I wrote, after the passage I marked, lest I should forget: 'Lungers Remember!'

NO EMPLOYMENT TO BE FOUND.

I cannot refrain from speaking of the persons who came to this country in search of work. The thing to be said is: Let no one come expecting work, because he can't work and get well at the same time—and because there is no work to do. If he could rope steers, or wield a pick and shovel as a miner, he might get employment. But this is a land of few industries. For years it has been flooded with health-seekers looking for light work, and they have already gotten all there is to do. 'But,' I can hear some one protest, 'it is a case of necessity, and work is the only alternative. What then?' Well, nothing! He can't get work, so let him face the matter calmly. He is better off in his own country without money than in this strange land.

I have said very little of the ranch, but I have done so purposely, for there is very little to be said. It is enough to say that a ranch is an impossible place for a tubercular invalid. The Western 'ranch' is an elastic term. It may be the barren land around a 'squatter's' shack, or it may be a tract as large as an Eastern county, or it may be anything between the two. But, whatever it is, it is no place for a consumptive. It is a place of hard work and privation, with, indeed, hardly enough of life's necessities for the average well man, and a sick man is as much out of place there as he would be in a coal mine. It is hard indeed to understand, for one who has been in this country and knows what conditions really are, how the idea ever got abroad that 'roughing it' would cure tuberculosis: it has killed thousands, and if the foolish belief continues to persist it will kill thousands more."

After reading these statements made by a man who underwent the hardships of the fight for health, and who kept his eyes open while the battle was going on, we are able to hold this out to the disheartened afflicted whose courage begins to fail.

The author makes the public acquainted with a well recognized experience of the Medical Man.

FEST.

ORIGINAL ARTICLES

HAY FEVER.

By J. W. TINDER,

ROSWELL, N. M.

It has been considered very unfortunate by many writers of medical works, that the term "hay fever" has been given to that disease as defined by Bosworth as a disease characterized by an annual recurrence, at a certain season of the year, usually the same period in the individual case, of an attack of a more or less aggravated form of influenza, the prominent symptom of which is an intensely swollen condition of the nasal mucous membrane, attended with sneezing and a profuse watery discharge, but when we come to know that the early writers and the early sufferers of this disease only knew of it during that time of year when the emanations from the hay and certain weeds seem to have been the cause, hence we do not wonder at them calling it hay fever.

HISTORY. This disease is known to have existed many years ago, even as early as 1517, but it was left for one Dr. Bostock, to bring it into anything like prominence. It was in 1819 that he gave us a detailed account of this disease as it occurred in himself. These early cases occurred in the time of hay-harvest and the blooming of ragweeds. When it was first recognized it was thought that the emanations from the hay was the sole cause, but from later investigations it is known not to be the only cause. The same disease occurs at the times of the year when there is no hay and weed to give forth their emanations. Certain seasons of the year give it other names such as SUMMER COLD, SUMMER CATARRH, POLLEN CATARRH, PEACH COLD, and other names that have no reference to the seasons, such as VASO-MOTOR RHINITIS, HYPERESTHETIC RHINITIS, PRURITIC CATARRH AND MANY OTHERS TOO NUMEROUS TO MENTION. The term vaso-motor rhinitis seem to be the most acceptable to the profession at large, but that of pruritic catarrh seem to be the most appropriate, looking at it from the standpoint of symptomatology. This disease is practically the same no matter in what season of the year it occurs. And when the writer uses the name hay fever he uses it generically.

DEFINITION. Hay fever is a disease that occurs annually in some and periodically in others and manifesting itself in attacks of severe forms of influenza, the most prominent symptom of which is an intensely swollen condition of the nasal mucosa and its attendant symptom of parozysm of sneezing and a profuse watery discharge from the nose.

ETIOLOGY. At the present time the medical profession is divided as to the real cause of this distressing disease. While the causes as summed up in our text-books are many, we will be content to name only the most important ones or theories as they might be called as there is no disease in all medical lore about which we know so little of the absolute cause.

Bostock was in himself unable to arrive at any definite conclusion as to the cause. In his first report he did not know and in his second he thought the emanations from the hay and weeds had less to do with it than did his exertions just prior to the attacks and together with the light heat and moisture. Many rhinologists hold to the theory that from its periodicity it must be influenced by seasonable changes. Some hold to the theory that the disease is wholly due to some pathological condition in the nasal passages, and assert that vaso-motor rhinitis never occur in a normal nose. Many would have us believe that the neurotic habit is only a symptom of a uric acid diathesis which seems to be the leading cause. Hemholz as early as 1869 basing his belief upon the watching this disease in himself, thought it to be due to a vegetable spore in his nasal mucous discharges. Not a few enthusiasts have followed off Dr. Shadle of St. Paul in believing his theory that certain diseases of the antrum of Highmore are the source of many cases of this malady. Then we have our atavistic friends when they can not account for it any other way say it is due to heredity. Probably the one nearer the truth than any other is Dr. Baden Kile of Philadelphia, in which he believes the cause to be that the local irritation in the nose is due to a chemical change in the secretion of the nasal mucous glands probably resulting from some uric acid diathesis. From the above which have been gathered from recent literature, we see the cause of hay fever is a matter of uncertainty and still in doubt. Probably if the truth be known more than one of these factors are concerned therein.

PATHOLOGY. There is no particular change in the structure of the nasal mucosa, although after some repeated attacks the mucosa becomes more redundant and flabby. The mucosa becomes very vascular and in spots there is much hyperesthesia.

SYMPTOMALOGY. If there is one symptom more pronounced in hay fever it is that of the early morning fits of sneezing. The patient is usually awakened early in the morning by sneezing. This will come on in exacerbations and the morning is well gone before the patient obtains much relief. These symptoms may occur at any hour in the day. During these attacks the eyes become red and watery. There is profuse lachrymation. Photobia is present. There is a copious flow of mucous from the nasal cavities.

The lining membrane of the nasal cavities becomes turgescient and breathing now becomes very arduous. Many patients are annoyed with a peculiar itching in the roof of the mouth where the two palates join. One may notice these patients rolling back their tongues as if to scratch the roof of the mouth.

The watery discharge from the nares become more profuse, the patient making futile efforts at the immoderate use of the handkerchief, of which he uses many in a comparatively short length of time. As the affection now progresses the conjunctiva of the eyes may become similarly affected and in some isolated cases the lining of the eustachean tubes are affected in the same way as that of the mouth. The scalp has been known to be so affected that the combing of the hair would provoke a spasm of sneezing.

There is a pruritis of the membrane lining the anterior part of the nares that is so intense that the patient is often heard to remark, "I can just rub my nose off" and then proceed with the rubbing. The affection presents itself

more than once a year in some patients, while in others it either occurs in May or June or August and September. Individuals suffering from this disease, after they have these attacks many times for this reason can in almost every instance predict the day and, in many instances, the hour when the attack will begin.

The attack of hay fever is usually attended with slight fever and a loss of appetite. A diagnosis of the disease is readily made as the patient presents himself in the office. The weeping eyes, red and swollen nose, probably sneezing and his general appearance of irritability, all these make the diagnosis easy.

PROGNOSIS. This is never grave. The situation that confronts the doctor is, can he relieve the suffering. A long-standing case is just as easily relieved as the most recent one. One would naturally infer that where hay fever had run on for so long that an asthmatic condition had set in, it would be harder to relieve, but not so.

TREATMENT. It makes little if no difference when it comes to the treatment whether it be called hay fever, rose cold, pruritic catarrh, vasorhinitis or any other name, the treatment remains the same.

There is a growing tendency among the careful clinical observers that the principal port of entry of bacteria of any kind into the system is through the respiratory tract and particularly the nasal mucous membrane. Under normal conditions the nasal mucosa is enabled to throw off or offer marked resisting power to, and becomes a trustworthy guardian against infection. But let the blood supply become deranged or a local inflammation so obstruct or alter its functions that the secretions become thick and viscid, acrid and crustaceous, then its protective powers are weakened or lost altogether. Minute points of ulceration may develop and these not only add to the dangers by producing culture areas for growth of pus, but also permit the immediate ingress of bacteria into the lymph and blood channels with consequent liability of systematic infection. The above emphasizes the great and it might be claimed the paramount importance of maintaining the upper respiratory tract in as nearly as normal a condition as possible.

The first effort at treatment should be to look after the local condition of the nasal mucosa. No scheme of hygiene or prophylaxis against any disease of the respiratory organs should be considered as complete without a proper and continued effort attention to the nasal mucosa.

The hyperesthetic areas should have their surfaces altered by the application of some of the caustic acids, preferably chromic acid. Each sensitive area must be ascertained and treated thoroughly until the aggravated sensitiveness is replaced by a normal sensation of contact. It is not wise in the use of these acids to make more than three or four applications in each nostril at one sitting.

If in these patients there be found nasal polypi, it goes without saying they should be removed, and the stumps cauterized with silver nitrate. If there be marked hypertrophic catarrh, a deformed septum or outgrowth from it, if in the honest opinion of the physician these be an exciting cause, remove them in the proper way. I favor the removal of these deformities in all cases for no other reason than they produce a chronic turgescence of the nasal membranes and blood vessels.

We know the excessively irritable condition of the nasal mucosa in many people, and when one of these patients presents himself to me for treatment, I usually spray the membranes with a one per cent solution of cocaine, following in about ten minutes with an application of adrenalin chloride, then when the tissues are well blanched and the breathing easy I then apply a 4 per cent SOLUTION OF SILVER NITRATE to all the nasal membrane, especially the hyperesthetic areas which have been determined beforehand. I conclude the treatment with a bland oil sprayed thoroughly over all the nasal membranes to protect them from the atmospheric changes.

I am fully aware that many rhinologists and writers of medical books condemn the use of cocaine in these cases, and it is probable that some of you may take exceptions to its use, but the fact is there is no drug to take its place so when it is employed by intelligent physicians for the relief of suffering humanity, there is little or no danger in its use providing the patient does not know of it. By this means he can never become a fiend. The above is spoken advisedly as the outgrowth of more than fifteen years of experience in the use of this medicine.

This is my general plan in the treatment of these sufferers, but special treatments should be sought out in each individual case after a careful and thorough diagnosis.

In the systematic treatment of hay fever there are many drugs employed, but the patient is better off without the internal use of them to relieve the paroxysm and exacerbations. It is true opium and belladonna will relieve for the time being but the after effects are worse than the good accomplished. If I were to commit myself to any anodyne for these paroxysm it would be in favor of the use of hyoscyamus and chloral.

Personally, I believe that by elimination is the best way to treat these cases by internal medication. The weight of authority says the blood count is not up to standard. The leucocytic action is below par. Whether it would prophylactic or curative I would say eliminate. Put all the eliminative organs in as healthy a state as it is possible to do by giving such known remedies as will act on these organs to the best advantage.

If from his investigations the physician believes there is a neurotic diathesis in the patient, there would be nothing better for that patient than the hygienic surroundings to be looked after. For this the one remedy paramount is the cold bath. If he can not tolerate this then the spinal douche of cold water. The end to be sought in this treatment is a general tonic to the central nervous system.

It is highly probable that all these sufferers can be permanently relieved if not cured by leaving those climatic conditions which seems to influence this disease, for a more favorable one wherein the disease does not exist.

Now a few words in regard to the antitoxin treatment of this disease and I yield the floor. Prof. Dunbar of Hamburg, has given it out that he believes this disease is due to a specific poison found in the pollens of rye, wheat, barley, and other granuous substances and with this in mind he has given us an antitoxin which is presumed to palliate the symptoms and to immunize the patient against pollen toxins.

This serum antitoxin is obtained by the inoculation of horses with the toxin obtained from the albumenoid bodies found in the starch particles of pollen granules. The serum from the horse is dispensed in powder or in liquid form in vials with a pipette.

The writer having had no experience in the treatment of hay fever with antitoxin, begs leave to give a resume of the treatment as summed up by Dr. Sommers of Philadelphia:

1. The antitoxin produces prompt and positive amelioration of the symptoms of hay fever in a large majority of cases.

2. In a small number of cases this is accompanied with a complete cessation of the symptoms for that season.

3. Where slight or no action is seen, it is due to improper administration, while in a very small number some idiosyncrasy is seen.

4. When results are obtained, it favorably influences all manifestations of hay fever in a large number of cases.

5. When given during an attack of hay fever irrespective of its severity, it produces palliation rather than a cure.

6. When successfully used during one season, it does not prevent the return of the disease the following season, although there is reason to believe that a slight influence in modifying future attacks does not exist.

7. The antitoxin is effective in both powder and the liquid form, but the latter is preferable, as it is staple and does not require a preservative and is more convenient for use.

Read at the Roswell Meeting, 1909.

MILK-SICKNESS.

(Trembles, Slows or Alkali Poisoning.)

By CHAS. F. MONTGOMERY, M. D.

ROSWELL, N. M.

With the studies of Jordon and Harris (of the Chicago University Laboratory) at Carlsbad, N. M., in November, 1907, began the scientific study of a once relatively common disease of animals and man, known as Trembles, Slows or "Alkali poisoning" in animals and Milk-sickness or "Alkali poisoning" in man.

While the clinical picture of the disease has been familiar to many laymen and practitioners of certain infested districts in Indiana, Ohio, Illinois, Kentucky, Missouri, Michigan, Virginia, Pennsylvania, Alabama, Georgie, North and South Carolina; later in New Mexico and southwest Texas; the profession generally has been indifferent and skeptical concerning the disease as a distinctly new disease but thought it a typical outbreak of a well known disease. Of those thrown in contact with the disease, the opinion was pretty uniform that the cause lay with the milk and fresh meat supply coming from infected animals. With animals the source of infection has been the subject of much

wild speculation, some of the more common causes suggested were ingestion of poisonous plants, such as Rayless golden-rod, poison-ivy and saltgrass, mineral salts and alkali water. The symptoms of the so-called "Alkali poisoning" as well as its treatment, have been familiar to many present for some years, but no one had an idea that it was identical with disease known as Milk-sickness.

Jordon and Harris have identified the causative bacillus—*Bacillus Lactimorbi*—leaving no doubt as to its causative relation to milk-sickness and the so-called "Alkali poisoning" of this region. Reasoning from their studies additional treatment was suggested which has proven of benefit.

BACTERIOLOGY. I cannot do better than to give you the words of Jordon and Harris on this important subject, "From all cases studied in man and animals there has been isolated a bacterium having the following characteristics; it is strictly aerobic, flagellated, sporing, liquifying bacillus, about the size of anthraxbacillus, and when sporing it resembles strongly the tetanus bacillus in its most characteristic form. It is, however, very prone to undergo considerable variation in morphology due to the method of cultivation, temperature and fluctuations in reaction of media. Stained with methylene blue the typical tetanus-like bacillus shows well marked polar and medium meta-chromatic granules. It may grow either quite vigorously or delicately on agar, depending upon whether it is incubated at 25, 30 or 37 degrees C.

Colonies on agar are generally of the streptococcus type, accompanied by a film growth of an almost imperceptible nature either on top or bottom of the agar surfaces. In dextrous agar stab-culture no gas is formed, and the stab growth is smooth, delicate and whitish. On potato no growth has been observed, but on Heinemann's synthetic potato median a so-called "invisible" growth takes place. Broth is commonly clouded in moderate degree and there is usually formed a pellicle on the surface, which ultimately increases in thickness and falls on the bottom of the tube. In gelatine the growth follows the needle track almost all the way down in an even manner and of a grayish color; the surface growth is scant and takes place around the needle puncture, is of a pearly gray color; liquifaction makes its appearance about the third to the tenth day in a saucer-shaped fashion and progressively extends outward and downward until the whole of the gelatine is liquified. Occasionally where liquifaction has been delayed feathery outgrowths from the stab have been observed. In litmus milk growth does not readily occur unless the median has been heavily seeded; then a slow appearing alkaline reaction makes itself noticeable about the third day at the surface of the milk, and later on extends throughout the tube, eventually rendering the milk semi-translucent; no clotting or proteolytic changes have ever been seen. On Jordon's asparagus medium a well marked surface film growth takes place at room temperature within three days, followed by a slight cloud of the whole medium."

PATHOLOGY. The lesions of milk-sickness in all cases studied post mortem have shown constant but not very marked pathological lesions; fatty metamorphosis of the liver, especially, and the heart and kidneys to a less degree. Serosus hemorrhages, especially epicardial; less marked elsewhere. Some inflammation of the duodenum and jejunum, with no gross lesion of

the large intestines although small ecchymotic patches with excessive mucous excretion have been noted. Pyen's patches show some swelling, but have not shown necrosis.

SYMPTOMS. The first symptom noted is a general muscular lassitude with the symptom more marked in the muscles in use, the weakness comes on slowly in unused muscles and often very suddenly after vigorous exercise; obstinate constipation is present throughout the attack, no peristalsis can be detected for days in the severer cases; nausea and persistent vomiting of all stomach contents but no stercoraceous vomiting has been noted, pain in the stomach may or may not be present, but never a severe pain, muscular tremor with muscular tenderness more marked over exercised muscles. Headache is usually complained of. Restlessness in the early part of the attack is usually followed by a mild delirium which in the severer cases is replaced by coma, in others words a marked intoxication. The tongue is coated with a whitish fur; the perspiration, the respired air and oftentimes the urine has a characteristic sweetish odor (of acetone), so characteristic is the odor that some have declared that a diagnosis could be made from it alone, in the dark. The pulse is not much affected at first, but gradually becomes faster and loses volume; the temperature may be normal, a slight fever or sub-normal (as low as 95 degrees); some cases complain of prickly sensations of the skin followed by an urticaria; the conjunctiva is injected; the urine is acid to litmus and contains acetone, B-oxybutyric acid and diacetic acid, but no albumen nor sugar. During convalescence which is often slow, there is a general nervous and muscular weakness and a marked loss of weight as in other acute infectious diseases.

TREATMENT. Prophylaxis should be thorough as the feces have been shown to contain the *B. Lactimorbi*. It is probable that the perspiration and urine contain the bacterium also. Infected animals should be destroyed as well as the excreta.

The medicinal treatment consists in purgation, best with large doses of Castor Oil, Sodium Bicarbonate one dram every hour for four hours. If improvement does not occur the Sodium Bicarbonate may be repeated. Elimination by the skin and kidneys—Hot bath is useful and very grateful to the patient. In the later stages of the disease, stimulants should be used. Strychnia being of most use. The diet should be liquid and nourishing. Absolute rest is to be enforced until well convalescent.

CONCLUSION. Milk-sickness is an acute infectious disease caused by *B. Lactimorbi*. It attacks cattle, horses, sheep, rabbits, dogs, goats, deer and man. It is variously called Trembles, Slows and "Alkali poison."

It has a definite symptomatology; with this in mind an early diagnosis is possible.

The treatment consists of elimination—bowel, kidney and skin—Sodium Bicarbonas in *dram doses* every hour for four hours which may be repeated if improvement is not noticed; to relieve the acidosis, acid condition, with complete rest of body and mind. Liquid diet and stimulants when indicated.

Propholaxis is necessary as in other infections. With early diagnosis and appropriate treatment complete recovery is to be expected in most cases.

TREATMENT OF ILEO-COLITIS WITH SALINE TRANSFUSION.

By C. F. BEESON, M. D.,

ROSWELL, N. M.

In the following few lines I wish to present to this Association in a general way a clinical study of the transfusion of fluid into the bodies of children suffering from the depleting influences of Ileo-colitis and allied conditions, with deductions drawn therefrom which seem justifiable at this time.

While this method of renewing the body fluids is not new by any means, as all of us are perfectly familiar with its wonderful effects following severe hemorrhages and cholera infantum, yet it is comparatively recent that it has been appreciated and used in the slower processes of depletion such as we have in the disease under the title of which I am writing.

I wish in the beginning to state that my experience with this therapeutic agent does not lead me to believe it to be a cure-all or a sure-cure, but I do believe it to be an important indication and an aid to the other means commonly used. That is it a life-saving measure in some cases I have no doubt.

It seems to be a measure of great value in cases in which vomiting is persistent and those in which the bowels are so irritable and the peristalsis so excessive that fluids by mouth are hurried on too rapidly for absorption to take place. It is also of great value in those cases presenting symptoms of Cerebro-spinal irritation. Who has not experienced the thirst following active purgation or of profuse perspiration when only a small fraction of the body fluids are lost? Who, then, cannot appreciate the demand there must be for fluids in the system of a little child weighing perhaps but ten or twenty pounds after purging and vomiting an amount seemingly equal to the entire weight of its body fluids? Who cannot but believe that this condition if continued will have a detrimental influence upon the natural forces to bring about the re-establishment of that equilibrium which is so essential to its recovery?

Nature has an old deserved reputation of overshooting the mark so often that it behooves us as her chief assistants to be ever on our guard to supply deficiencies and restore lost balances.

Those who have correctly interpreted that searching, inquiring look which the stricken child gives its attendants know that the little one wants water, its body is demanding fluids and I doubt if there is a hearer present who would hesitate to give it. Experience sometimes compels us to ask, "how can we supply this demand?"

The withdrawal of the body fluids produces a concentration of the blood with a probable increase of the ratio of toxic matter to fluid media, an actual dehydration and destruction of the red corpuscles resulting. The outlying channels and peripheral vessels are drawn upon and depleted by a mechanical process to keep supplied the enlarged abdominal vessels in consequence of which the skin becomes dry and parched, the tissues shrink, the features become drawn and the eyes sunken. The perivascular spaces of the brain and cord become depleted and collapsed, producing a negative pressure in the arterioles with a consequent venous engorgement. Important nerve centers

supplied by terminal arteries suffer from anemia by the same process. Important nerve cells are denourished and irritated by this dessicating influence and toxic concentration. The sunken fontenelle, restlessness, stupor and delirium may rapidly follow, with finally perhaps rigidity of limbs and spine, retraction of the head and the so-called hydrocephaloid symptoms, rolling of the eyes, convulsions and paralysis. Post mortem examination seems to substantiate this view by showing nothing to the naked eye except varying degrees of anemia and venous hyperemia.

It requires several days for these tetanoid symptoms to develop, but when once established they are very persistent. I have seen them disappear as if by magic after the transfusion of salt solution only to return when the depletion was reestablished.

In speaking of these nervous phenomena I do not have reference to the early twitchings, restlessness and convulsions which may initiate the attack and disappear when the fever is reduced and the bowels moved. I have records of a case in a 11-months old boy who on the sixth day became comatose, began twitching, rolling of eyes, with rigidity of neck muscles, sunken fontenelle, dry parched skin, bowels discharging about $\frac{1}{2}$ ounce every hour. Weight about 15 pounds. The blood examination showed red cells small, angular, shrunken and shriveled, with a tendency to mass instead of rouleaux formation; a moderate leucocytosis with haemoglobin 80 per cent.

This child was given under the skin from 4 to 6 ounces physiologic salt solution daily during the following 18 days, 96 ounces in all. Cerebro-spinal symptoms ceased immediately, but would return at intervals. The skin became soft and tissues filled out, the child improved in every way except the diarrhoea—even became playful at times, never suffered from thirst at any time. The diarrhoea was not influenced in any way, the blood content did not materially change except to lose its coagulability.

Death occurred on the 24th day. During the last day or two the transfusions were stopped upon the request of the parents, the cerebral symptoms returned and became very severe before death.

This case is cited because it was used as an experimental one by the consent of the parents. It was the second case in which I had used this means of combatting depletion in these cases some two years ago. It was through the kindness of Dr. Mayes whose case it was that I was enabled to further test the treatment. The fluid was given at a temperature of about 110 F. in the loose tissues of the back, under proper aseptic precautions. A sterile solution composed of CaCl, $\frac{1}{4}$ gramme Pot. Chlor. $\frac{1}{4}$ gm., and Chlo. Sod. 9 grammes to the litre of aq. dest., the so-called physiologic salt solution prepared by Parke Davis & Co. That life was prolonged by this measure those in attendance seemed to have no doubt.

I have used it in many cases since and always with strikingly favorable results. Cases in which it is most indicated are obviously of a very serious nature and the ultimate outcome is not always a true criterion of its merits. A close observer cannot help but think that the depleting influences of these diarrhoeal diseases play an important part in the mortality of this disease.

I have used salt solutions in varying strengths and believe that a 1% to 1¼% solution lessens the diarrhoea.

Further study along this line is needed as I believe it is a valuable therapeutic measure for this disease and is here presented for your consideration.

I have not been able to draw any conclusions from its early administration, mostly owing to the refusal of parents to allow it to be given.

A marked rise in temperature follows its use in some cases.

Excessive quantities seem to do harm.

Its physiological action is as a cardiac stimulant.

It flushes the capillaries, makes up blood volume and dilutes toxins circulating therein, thereby lessening their poisonous effects. By filling the blood vessels it lessens the tendency to reabsorption of poisonous fluids from the bowel.

Its action as a renal stimulant is positive and prompt. Such an action by perfusion naturally has the tendency to wash away and dilute toxic products, at the same time preventing damage to the renal epithelium from the irritating effects of concentrated urine.

And last, but by no means least, it relieves the little one of that awful thirst which in some instances becomes so insatiably terrible.

Read at the Roswell Meeting, 1909.

THE TREATMENT OF PULMONARY TUBERCULOSIS

Based Upon the Assumption That the Dietetic Cause of the Disease is Lime Starvation—Preliminary Report of Results.

John F. Russell, of New York, reports the results of his treatment of dispensary patients on the theory that the cause of tuberculosis is insufficient lime salts in the food. To supply this need he made use of clotted milk and eggs, and later of milk and eggs mixed with hydrochloric acid. He believes that it is necessary to have in the patient's stomach lime salts, hydrochloric acid, and pepsin ferment, while the pancreatic ferment is working normally. The use of clotted milk brought about a plastic pleural effusion about the location of the tuberculosis, which ended in a cure of the lesion. The patients were taught to expect this and to hail the pleuritic pain as a sign of coming cure. The hydrochloric acid and milk were prepared at the dispensary, where a portion was drunk and the remainder was taken at home morning and night. The patients were encouraged to continue their work, and rest treatment was not given. An attempt to give more lime salts by the use of ground bone had no results. Lime starvation may be due to absence of gastric juice, or to taking food poor in lime. The hydrochloric acid activates the rennet zymogen

and stimulates secretion of pancreatic juice. The administration of the acid causes decided improvement of general condition. Illustrative cases are given. The result gave promise of an improvement of treatment of tuberculosis in the home climate.—Medical Record, 1909.

BLOOD CULTURE IN FEBRILE DISEASES.

Kiralyfi reports an interesting series of observations on 80 cases in which blood cultures were made. Sixty of these cases were acute infectious diseases, while the other twenty were cases of various kinds during the course of which fever of obscure origin occurred. In these 20, cultures were negative in all but two, the fever being due to other causes than bacterial toxins. Inasmuch as the occurrence of bacteriemia in the course of chronic diseases makes the prognosis graver, Kiralyfi thinks such negative findings may often be of value. Of the cases of acute infectious disease, 54 per cent gave positive cultures. Of these, the cases of typhoid fever, septicemia and the group comprising endocarditis, chorea and infectious arthritis were of particular interest. Of thirteen cases of typhoid ten gave positive cultures. Of the other three, two were in a late stage, where positive results were not to be expected, and one gave no Widal reaction, and the diagnosis was uncertain. Several gave positive cultures some days before the Widal reaction appeared. One case giving typical clinical appearances of typhoid was recognized as pneumonia by the finding of the pneumococcus in the cultures; 80 per cent of the cases of septicemia gave positive cultures of the pus organisms or Fraenkel's pneumococcus, and these cultures were of some value in differentiating from typhoid. Of special interest in the endocarditis and arthritis group was the occurrence in several cases of the pseudo-diphtheria bacillus.

Aside from the values of the blood cultures in differential diagnosis, Kiralyfi thinks that the frequency of positive results in comparatively mild cases shows bacteriemia to be much less ominous than was formerly supposed.—*Zeitschr. fur. Klin. Med.*, Vol. 68, p. 401.

STANDARDIZE PHARMACOPOEIA.

Representative Coudroy, of Missouri, who has given much time and study to the pure food and drug act, under which hundreds of prosecutions have been instituted by the government, has just introduced in Congress an important amendment to that bill which will prove of vital importance to the physicians as well as druggists of the country.

It provides, among other things, that "the United States government shall edit and publish the United States Pharmacopoeia or National Formu-

lary, and have a complete test for purity and strength of all drugs and chemicals which shall conform in strength, quality or purity to the standard prescribed or indicated for a drug of the same name recognized in the United States Pharmacopoeia or National Formulary; that it shall be made a criminal act if every drug manufactured or sold for the benefit of mankind or animals is not standardized U. S. P.

The medical profession would welcome the passage of such a law, as it would tend to do away with much confusion that now exists regarding the purity and varying strength of numerous drugs now on the market.—Virginia Medical Semi-Monthly.

BOOKS REVIEWED

A Text-Book on the Practice of Gynecology. For Practitioners and Students. By *W. Easterly Ashton*, M. D., LL. D., Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Fourth Edition, Thoroughly Revised. Octavo of 1099 pages, with 1058 original line drawings. Philadelphia and London: W. B. Saunders Company, 1909.

Ashton's text-book was always one of our favorites, the new edition even more so.

Ashton is thorough, he leaves nothing to the imagination of the reader but, with word and picture, enters into detail and not only states what has to be done but also how it is to be done. The older practitioner may find much detail in illustrating overdone, but the book is not intended to be a reference work for the specialist, but a guide for the practitioner and student.

Of great value is the arrangement of the work on anatomic basis permitting a discussion of the methods of examination of each organ before entering into the description of the disease itself. Hereby a special chapter on "physical examination" became unnecessary.

The chapter on shock has been rewritten on strength of its modern pathologic conception.

A Text-Book of the Practice of Medicine. By *James M. Anders*, M. D., Ph. D., LL. D., Professor of the Theory and Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia. Ninth Revised Edition. Octavo of 1326 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1909.

This new edition contains all the modern advances of medicine which are of real importance and much obsolete matter has been rooted out. The book is compact and sufficiently complete to cope with all needs of the busy practitioner who wants quick and concise information. The book was never claimed to be an encyclopedia of the practice of medicine, but there is no doubt that as a one volume handbook, Anders' text-book is one of the best.

A Text-Book of Physiology, for Medical Students and Physicians. By *William H. Howell*, Ph. D., M. D., LL. D., Professor of Physiology, Johns Hopkins University, Baltimore. Third Edition, Thoroughly Revised. Octavo of 998 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1909.

This new edition is a valuable addition to the practitioner's library in as much as in Dr. Howell's work main emphasis has been laid upon those facts and views which will be directly helpful in the practical branches of medicine. Science says: "Much new material is presented to the public for the first time. The number of new illustrations is a feature." The entire litera-

ture has been thoroughly digested and the important views and conclusions introduced into this work, so that the reader has the benefit of the latest advances along this line. Illustrations are rather scanty, but those used are very good.

Examination of the Urine, a Manual for Students and Practitioners. By G. A. DeSantos Saxe, M. D., Instructor in Genito-Urinary Surgery, New York Post-Graduate Medical School and Hospital. Second edition, enlarged and reset. 12 mo. of 448 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1909.

This little work lays stress upon the clinical side of urine analysis. He tries to teach not only the reaction but also its interpretation.

It is a pleasant sight to notice another step toward the abolishment of the obsolete complicated relic of colonial times, the apothecary system, and adoption of the metric system.

In one regard the book is faulty; page 337 the author says: "The absence of tubercle bacilli * * * is by no means decisive in diagnosis, and tuberculous lesion may exist in the kidney or elsewhere in the genito-urinary tract without any discharge of tubercle bacilli into the urine." We take exception. The author gives only the old-fashioned carbol-fuchsin stain. If he would make use of the Spengler or Gram method he would find the TB more readily because its absence is only apparent.

On the other hand, since TB is contained in the circulating blood in the majority, if not all consumptives, the presence of TB in urine or sperma is by no means an indication of kidney lesion or other tuberculous lesions of the genito-urinary tract.

Diseases of the Personality. By Prof. T. H. Ribot, Paris. Translated by P. W. Shedd, M. D. Published by Buericke and Tafel, Philadelphia, Pa.

The question of alterations of personality is a burning question of the day and we can only welcome this psychologic study which is worth reading and is as such of great intrinsic value. This fact will make one overlook the frequent annotations in homeopathic lore and slang except when one's interest is awakened to know how a one hundred millionth grain of charcoal or violet, or soda, will cure amorous dreams, vide page 9. We find on page 43 that soda will cure indifference to relations and suggest^d that slighted mother-in-laws buy a stock of soda for Xmas presents.

NEWS

To the Secretary of Each State and County Medical Society and Other Interested Members:

At the last meeting of the American Medical Association at Atlantic City the following report of Committee on Miscellaneous Business was adopted: "The Committee recommends that the President of this Association appoint a committee of five members to inquire into the desirability and practicability of the establishing under the auspices of the American Medical Association of a fund for the assistance of physicians disabled by sickness, and for a sanatorium for the treatment of such members of the Association, as may be afflicted with tuberculosis or similar diseases; such committee to report to the House of Delegates at the next annual meeting of the Association."

As a basis for wise action the Committee urges that the Officers of State and County Medical Societies, and others interested in the subject, should at the earliest possible date, forward to the secretary of the Committee, Dr. A. C. Magruder, Colorado Springs, Colorado, answers to the following queries, with some account of any special cases that seem to illustrate the need for provision for disabled members of our profession.

1. Is there any provision by your State Medical Society, or local Society, for the care of destitute and disabled physicians and those dependant upon them? If so, how is such care provided?

2. What number of instances of special need for such assistance (or sanatorium treatment) have arisen in your locality within the last five years and what number of your members need such assistance now?

3. About how many members of your County Medical Society are at present afflicted with tuberculosis or similar diseases, or have, within the last five years died, or withdrawn from professional work on account of such disease?

It is earnestly requested that this matter be brought before each County and State Society at its next regular meeting, and that the desired information be furnished our Committee at the earliest possible date.

Fraternally yours,

EDWARD JACKSON, Denver, Colorado.

JEFFERSON R. KEAN, Washington, D. C.

A. T. BRISTOW, Brooklyn, N. Y.

H. B. ELLIS, Los Angeles, California.

A. C. MAGRUDER, Secretary, 305 N. Tejon St.,
Colorado Springs, Colorado.

Dona Ana County Medical Society held its regular monthly meeting January 27, 1910, at the office of Dr. J. L. Burnham. As there was not a

quorum at the December meeting the officers for 1910 were not elected at that time, but this was attended to at this meeting.

R. E. McBride was elected as President.

C. A. Mitchell, of Mesilla Park, Vice-President.

Troy C. Sexton, Secretary-Treasurer.

B. E. Lane, Delegate to N. M. M. A.

J. H. Johnson, of Organ, Censor; term expires 1910.

R. E. McBride, Censor; term expiring in 1911.

W. C. Field, Censor; term expiring in 1912.

At this meeting communications were read from Dr. Simmons of the American Medical Association; and Dr. C. W. Taylor-Goodman relative to open meetings of the Society for the instruction of the laymen. It was moved that, "The suggestions in the communications be adopted, and that at a future date to hold an open meeting of the Society at which these topics be used. The time and topics to be decided by the President."

Society adjourned until the fourth Thursday evening in February at 8:00 o'clock.

The Bernalillo County Medical Society, New Mexico, has elected the following officers for the coming year: President, Dr. L. G. Rice; First Vice-President, Dr. H. B. Kauffman; Second Vice-President, Dr. C. A. Frank; Secretary, Dr. F. E. Tull; Treasurer, Dr. F. Osuna; Censor, Dr. Walter G. Hope. Delegates to the annual meeting of the New Mexico Medical Society, Dr. J. F. Pearce and Dr. H. B. Kauffman.

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EDITORIAL

THOSE RESCINDED RESOLUTIONS.

Printing the resolutions adopted by the Council of the Chicago Medical Society in the last issue brought the editor many handshakes, but also—yet far less—protests.

According to information gathered from the J. A. M. A. these resolutions are rescinded.

We feel forced to keep the same stand expressed in the closing sentence of our former editorial to the effect that *if there exist conditions which are wrong they ought to be remedied.*

The resolutions reached us in an official envelope of the Chicago Medical Society. It was a gross breach of *decorum* that the secretary did not notify us of the later action on same by the Chicago Medical Society. There is some rumor that the action is not final, that there will be a sequel.

It is also very strange that the J. A. M. A. did not discuss the resolutions until after they were rescinded. When reported first, they occupied a space which would not attract the attention such an action deserves. Was there a reason for doing so? We fear so, and this very omission creates the suspicion that part of the resolutions (about the free discussion of reforms) was fully justified.

These resolutions were reproduced in nearly all state-journals before they were rescinded and we had waited to see what response would be made. The soft-hearted readers, who are offended, may rest easy, we do not stand alone. We may offend again, but we repeat what we said. We are components of the A. M. A. and it is the duty of the editor of the official organ of the state associations to make the members acquainted with actions taken by other societies, if of general interest.

The American Medical Association first and above all! Men may come and go; editors may change, but the A. M. A. will go on.

The Secretary-Editor-Manager is nothing to us. He is our employee. He is not the A. M. A. His personal affairs and fights are of no interest to us until they hurt the Association. Who of us is willing to have us represented by an unworthy officer?

The Secretary-Manager-Editor was attacked by Lydson, his carrier was attacked. Men like Daniel followed Lydson. A large part of the Medical Press did. The attacked kept quiet. He made us believe that the accusations were true. Not all attacks were of interest. We do not care about the alma mater of a man if he has the right stuff in him. Big schools have produced fools. We care not what the man has done. Those who represent the society and elected him ought to have reasons for doing so.

It is different if our interests are not guarded, if there is want of economy.

if we cannot express our ideas in our own journal, if positions are misused for personal purposes and if the power is concentrated in too few.

Should the editor be removed the J. A. M. A. will continue, perhaps better, if there is cause for such action.

The resolutions do not seem to be personal, yet in an editorial of the J. A. M. A. they are said to be so. They cannot be personal if conditions needing reform do not exist. In such case they are lost. But are they? The very many who did not know about the pamphlets used in the controversy could not suspect a personal motive.

The resolutions are rescinded, but they cannot be taken away again. One body once went on record and all rescinding will not whitewash the impressions left. A finger has been pointed to a sore, or to a spot and is claimed to be a sore. Removing the finger will not remove the spot. Is there a sore?

Lyston came with the goods; at least it appears so. We looked for a scrap; we always enjoy a good scrap; the world loves a good fighter; but there was no fight and no reply.

Counter charges are made now. Lydston is said to act in the interest of a very damnable traffic, the traffic exposed as the Great American Fraud. If this is true, and the editor of the J. A. M. A. is honor-bound to show us, Lydston will be morally defunct, he will be dead as far as the honest medical profession is concerned, he will have ceased to exist for the A. M. A. True or not, if he has pointed out the need for reform, if by an impure motive, the reforms will go on, but he will be forgotten.

The work of the A. M. A. has been good; we are proud to belong; only a man without ambition will refuse to be honored by affiliation. We belong to the organization and not to one man or to a ring.

The Journal is ours. It belongs also to Lydston. He had a right to be heard. He claims he was refused. The editor had no right to refuse any discussion of conditions and reforms, if coming from a member in good standing and when if without offense. Such refusal placed the editor in a queer light, he appeared "personal". Our dirty linen ought to have been washed at home. It is a sad experience that the nostrum-manufacturers make use of this controversy which will leave a bitter taste in our mouths for many years to come. The resolutions may be out of force as far as the letter is concerned; their spirit will live and at St. Louis steps ought to be taken if necessary.

Americans—even if foreign born—have a strong antipathy against duties without representation. The taxes in colonial days were trifles, but the taxation without representation did it. The government of our dear A. M. A. must not be unwieldy, but we want representation. We, the members, want the right to find out things.

Let us look at the resolutions from another view-point. The work of the secretary, manager and editor of the large association, of the largest journal of our profession in America, must be naturally large. One man cannot give much time to each branch. Does it not sound reasonable to have one man at the head of each branch? Is it not true that only seldom a business man is a good scientist. The manager must be a business-man, the editor must be a scientist who does nothing but scientific study. There is not much requirement for the office of secretary; this is more honorary. This office may require tact, it certainly does not require ability like the office of editor.

Some readers may feel shocked that we discuss the pro and contra. It must not be forgotten, however, that these demands for reform were made and

that the need for such reforms was not disproven entirely. It must not be forgotten that the editorial in the J. A. M. A. was a masterpiece of implying much without saying much of anything. Some of the demands contained in the rescinded resolutions were pointed out as without reason, but how about the others?

We have only one aim: the aggrandizement of the great A. M. A., of which we are proud. If this very aggrandizement can be brought about by reforms, may they be to a disadvantage of one individual or of many, then these reforms are in order and our loyalty to our great national organization demands that they be carried out.

—F. T. B. F.

SEX EDUCATION.—SOCIAL HYGIENE.

We cannot think of a greater field for the education of the public if given the largest scope. Education in sex-matters means reduction of evil as far as venereal disease is concerned. Education in social hygiene means more, it means education of partnership. To bring this about the educators must be educated first. The scope of general education must be enlarged. It means the teaching in schools biologically and physically of procreation of plant and animal life. This will teach our procreation. We are "man,"—evolution has brought us to a higher development than most of the animals. A condition has been reached in which our progress as genus or as species does not depend any more merely upon conditions surrounding us but our further evolution depends largely upon our own efforts. We have to classify us as "*homo sapiens*" amongst the animals. The fact that we classify ourselves makes us belong there. We are animal. Yet ours is not purely animal life although our animal life is not different from that of other animals. Animal life depends mostly upon instinct. Our intellect,—whatever that may be,—call it soul,—call it mind,—be it eternal or temporal,—be it God's gift or evolution's product,—has partly overcome instinct as a dominating factor of our life. We know that we live!

It would be foolish to deny that animals are not influenced to a certain extent by mind or traces of intelligence. Your dog knows you. Your cat remembers you. There must be some process like thought else the St. Bernard would not search for the snow covered traveler; else the monkey would not place a chair or box upon the table to reach higher.

A claim is made for rudimentary speech of monkeys. It is clear that by certain sounds their wants can be distinguished and their temper announced. It may sound vulgar, but to observe monkeys picking vermin from each other makes us believe in some mental faculty.

Stress must be laid upon teaching sex matters as moral prophylaxis. Morality in general is the arrest of instincts by intellect. A child is a savage governed by instincts. There is morality connected with each of our instincts. But here we consider only the sexual instinct and its morals. What are morals?

They change with time and with conditions. When his fellow-citizens demanded from Lot his guests for sodomitic purposes he offered his virgin daughters to the mob. Hospitality was then above virginity.

In some far away country corner of Japan the host will offer you his servant maid when you stop as his guest over night. The Kanaka saw nothing

immoral in offering his wife to his guest. The Brahmin was moral to deflorate the brides of others. The barren Chinese woman finds it moral for her husband to have a concubine.

Take the religion prevalent in this country, a religion which is professed mostly only by force of habit. It sounds too bad to be called an "atheist"!

How many shocking happenings are not recorded in the source of modern religion and these very records are considered inspired by the Lord. Take the so-called Old Testament. Whenever some act was immoral it meant disease or death. Lot's daughters did not die when they helped themselves to offsprings. It was not immoral for Abraham to leave his wife Sarai to the king of Egypt. The immorality apparently was with the king because the Lord punished him; *Gen. xi. 17. "Flagellavit autem Dominus Pharaonem plagis maximis et domum ejus, propter Sarai, uxorem Abram."* The same happened to Abimelech.

What they contracted we can only guess. Even theologians suspect it. The great Villalobos, physician to Charles V and to Philip II, wrote.

"Por este pecado en la sacra escritura,
Al rey Faraon le hallamos tenella,
Porque él fué vencido de gran hermosura
De Sarai."

Concubinage was not immoral, polygamy only natural and extended far into the Christian era. Even later Popes occasionally sanctioned in peculiar cases a second wife. This leads to the kernel of the question of morality. Sexual morality means that sexual intercourse is moral only between man and wife. Sexual activity is restricted to the married. The strongest instinct is curbed into narrow limits.

Religion says that marriage is a divine institution. Law says it is a civil contract. Science says nothing. Science is at sea when it is the question of harmonizing laws of nature and laws of society. There is only one solution: teach the individual that intellect must master instincts, educate his will-power.

Yet man is beast after all, the animal side of our existence will not be suppressed entirely. This statement would open discussion about degeneracy and artificial limitation of procreation. The scope of social hygiene becomes too wide for us.

Education is the only hope for improvement of present conditions; but first educate the educators.

If the young man or woman would know more about sexual functions, if much of the secrecy about genesic organs would be removed, less time would be given to morbid curiosity and speculations. Is this so-called morbid curiosity really "morbid"? I call it natural that the child wants to know, it has a right to know.

Knowledge will divert the mind from the genesic organs and functions. These speculations, this secrecy and considering sexual matters impure have done much damage, it was often dangerous. Not as disastrous, however, as wrong knowledge instilled by venial venders of nostrums, by quacks and charlatans.

How many girls do not masturbate without knowing what they are doing? Information stops the habit. How many boys are victims because their curiosity led them to it?

Would the depraved female rapist ruin as many young boys, mere children, if these boys knew about the danger lurking in impure intercourse?

Who shall educate? Who shall share the responsibility? All. The pa-

rent's truth is more beautiful than fiction. Is it not more beautiful to tell a little girl that the baby brother, just arrived, left the body of his mother, which is her mother, where he has been nourished and was growing and was part of the mother? Is this not nicer than the story about the stork or the doctor's satchel?

In school botany and zoology are taught. Procreation can be instructed whenever the age of the pupil is sufficiently developed. The teacher must never refuse to give truthful information to pointed questions. Answers can be short, but they must be true.

The clergy can do much. Information is often better than warning and frightening. A little less fire and brimstone and a little more knowledge of human nature and its animal instincts is often indicated. "Thou shalt not" may be sufficient for some, but many want to know "why". The Old Testament contains various chapters on sexual hygiene. Moses was crafty and wise. He knew the people. He knew the power of superstition; whenever he gave rules,—and his rules were good,—he made them "divine laws". Venereal disease seems to have been pretty general. Whenever the Jews overpowered their enemies and left the women alive something happened; plagues did strike them. To protect his people, Moses was radical, he ordained the *slaughter of all female prisoners who had known men carnally*. This was social hygiene by martial law!

The physician has often the opportunity to do good. *The physician so far was about the only member of human society who laid aside prudishness.* The physician formed organizations for such purposes. Society has followed. Governments followed. But, until the movement becomes universal, many errors will be committed.

In Europe the faculties of some universities and even high schools furnish the students with folders containing information about the venereal peril. In this country many states have organizations and societies. The best attempts for public instruction is a folder published by the Spokane Society for Social Hygiene. The folder for women is the best the writer saw of this kind of literature.

By these methods sexual abuse will be reduced and the venereal peril diminished. But prostitution will remain and no lawmaking will do away with it. Prostitution is as old as the human race and our race will be different when prostitution will be abolished. To ignore prostitution is dangerous, it must be made harmless by the eradication of disease. The man who uses a prostitute is as guilty as the woman who gives herself to the man. The woman deserves as much protection as the man. Is it not the men's fault that most prostitutes become such? Why shall we discriminate? Who is the most immoral of the two? Is there any difference? Is not the life we force them into the cause of their further depravation?

Are there not many prostitutes more unfortunate than wicked?

The physician is placed in the most difficult position. The lawyer can point out the laws of the land, the preacher the laws of religion, but the physician has to meet problems concerning the laws of nature and their conflict with human society and often with hypocrisy. He can improve the individual's morality by pointing out dangers, by explaining that continence is not bad for health. He will be asked how to prevent venereal disease, he knows he is promoting immorality from society's standpoint, but this is his duty. Aside from this apparent prerogative of the man to gratify his sexual instinct,

with prostitutes the physician meets another kind of illicit intercourse. Love and passion will know no barriers; existing obligations are forgotten. Sexual selection will guide the individual, the impulse will overcome reason. The barriers of law, religion, society prove artificial; man is animal after all. In these cases the physician is powerless to teach social hygiene. He may disapprove, but he knows the laws of nature and knows the wisdom of the saying of the son of Mary. It is not for him to lift a stone.

"venereal peril". There is one remedy until education has born fruit. It may sound radical, it may sound cruel, but it is right nevertheless. Protect the prostitute by forcing men to be healthy. Make it a crime to transmit venereal disease. Let each case of venereal disease be reported. Let venereal diseases be considered as what they are: contagious. This cannot be done at once. It can be done gradually. Time will show that the sexual impulse cannot be regulated by law. The will-power varies in different individuals, the religious standard will vary, temptations will remain; the sexual instinct loses not its strength in the educated. The man or woman with weak will-power, strong passion and own standard of right may be wrong to our conception, but they deserve and demand protection just the same. The only solution will be: *drastic laws regulating the transmission of venereal disease.*

F. T. B. F.

IS THE PREGNANT WOMAN RECEIVING THE CARE AND ATTENTION SHE DEMANDS?

The practice of Obstetrics has not reached today the degree of success satisfactory to the conscientious and progressive physician. There have been great advances in this branch of medicine during the past decade, but there is still too great a mortality connected with the physiological act of child-bearing.

If we but pause and reflect we must blame ourselves for this great mortality. Too many of these deaths are preventable. Statistics tell us that 7% of the women who die during the child-bearing period are victims of that PREVENTABLE disease Puerperal Septicemia.

Pregnancy is a natural physiological function. In a state of perfect health it should be accomplished without disease or suffering. But, how often is this the case? So rarely, indeed, that it has been styled "a nine months' disease".

It is the tendency today to ridicule the pregnant woman for complaining, or to make light of her aches, etc., and even the physician often turns a deaf ear to her entreaties for help.

In the disturbed and hypersensitive condition of the pregnant woman's mind and body, the over-worked organs readily pass from an exaggerated physiological function, to a pathological condition. The latent or mild forms of disease, especially of the kidneys, heart and nervous system, may slowly develop dangerous and uncontrollable symptoms. But proper, timely advice from the physician will generally ward off disease, or prevent it from becoming dangerous. But too often this advice is neglected, until too late.

From a practical standpoint, let us ask ourselves: "What care and attention does the Pregnant Woman need?" In the first place the care of the pregnant woman should begin with conception. The laity should be taught that whenever a woman discovers herself to be pregnant, she should at once

notify her physician. She should at once receive advice and instruction as to the conduct and dangers of pregnancy, and the physician should gain such knowledge of her as will enable him to successfully manage both her pregnancy and labor. He should at once learn the patient's personal and family history, with all previous diseases, and all difficulties of previous labors, all personal and family peculiarities, etc. The patient should then receive advice in regard to her food, its character, and when and how it should be taken; as to bathing, and how performed; as to proper clothing, and how worn; as to the dangers of constipation, and how prevented; as to the bad effects of sexual intercourse, and the necessity of its control; as to the proper care of the breasts; and of the necessity of frequent examinations of the urine. She should be informed of certain danger signals, and impressed with the necessity of notifying the physician promptly of their appearance.

The physician should in every case during the seventh month make a careful physical examination, to determine, presentation and position of child, and to note abnormalities, especially in the pelvic measurements.

And timely attention must be given to the disorders of pregnancy, that the patient's condition may be made as comfortable as possible, and serious consequences averted.

The physician fails in his duty as a physician, when he neglects to instruct his pregnant woman in hygienic laws; to watch for early signs of disease, and to check it at the start; to correct abnormalities, when possible; to obtain full knowledge of the mother and child. Thus forearmed he will be prepared to successfully treat emergencies that may arise during labor, and to lessen the unduly large mortality of child-birth.

If proper management during pregnancy will lessen disease, and lower the mortality rate—if proper attention better fits the woman to go through labor and assures a safer result to both mother and child—is it not time to pause and reflect, and to ask ourselves the question: "Is the Pregnant Woman receiving the care and attention from the physician that she demands?" I fear not.

J. W. C.

ORIGINAL ARTICLES

THE ETIOLOGY, PATHOGENESIS, AND TREATMENT OF VESICAL CALCULUS.

By J. W. COLBERT, M. D.,
ALBUQUERQUE, N. M.

The island of Porto Rico is a hotbed of lithiasis, especially urinary calculi, and my paper today is based upon observations during two years hospital work upon the island.

Vesical Calculus is an ancient affection—perhaps as ancient as the human race. Recognition of the condition is certainly as old as medical literature.

Why do stones form in one bladder and not in another? Why is it that, in Porto Rico for instance, where these stones are so common, females and negroes are almost immune? What conditions are essential to the development of a bladder stone? Many interesting theories have been advanced on these questions since earliest times, and they have elicited thought from the ablest men in medical history—and still the questions are puzzling. Yet we know more about stone formation than we did a few years ago, and eventually we may be able to take intelligent measures for the prevention of urinary calculous disease.

This much we know: the formation of a bladder stone requires a union of at least two factors, namely:

(1) The presence in the urine of the inorganic salts, which constitute the stone-forming materials;

(2) The presence in the urinary tract of a catarrhal or inflammatory condition which furnishes the organic material, or the cement-like exudation, or the frame work.

I believe that some irritation of the urinary passages must precede the formation of a calculus, certain it is that the direct cause of a urinary calculus formation is the exudation of a colloid substance derived from the blood and tissues. This colloid substance may be present in a normal condition of the urinary membrane, as claimed by some, but I believe that congestion or inflammation must be present before there can be an exudation of this substance.

The causes of congestion or inflammation of the urinary tract are numerous, and too well understood for me to mention fully. One of the most common causes, however, is irritating urine, this being the result of crystals or high concentration. In the vast majority of cases the crystals found in the urine are there as a result of derangements of the digestive function—with malassimilation, or tardy nutrition. Whenever the urine increases in acidity, the uric becomes precipitated, and likewise the urates become precipitated when the quantity of water is not sufficient to dissolve them. The use of certain vegetables, such as tomatoes, asparagus, etc., produces an oxaluria, which may be physiological in some subjects, but in others is apt to produce a lithiasis. And here, to my notion, is where hereditary predisposition plays a part. I admit that this is still an open question. Many good men lay much stress upon this

point of heredity, while many equally as good deny to heredity any part whatever in urinary stone formation. Personally, I am inclined to believe that heredity plays an important role—and for two reasons:

(1) Many authentic instances have been reported in which the uric-acid diathesis has existed through several generations in a family, making its members liable to the occurrence of calculus disease. A tendency to oxaluria or oxaluria or phosphaturia is equally transmissible.

(2) My personal clinical investigations, not only in Porto Rico, but in the wards of New York hospitals, show inheritance in many cases from either one of the parents.

The so-called remote causes for stone formation are without doubt often inherited, and I am persuaded to believe that future investigations will prove that other hereditary factors come into play.

The introduction of foreign bodies into the bladder is often the origin of the infection, as well as the nucleus of the calculus. These are the cases most commonly met with in women—foreign bodies introduced during manoeuvres of masturbations. When the foreign body remains in the bladder it soon becomes incrustated with salts. We have all noticed with what rapidity a permanent catheter becomes covered with phosphatic concretions in cases of infected prostatic bladders.

In chronic cystitis the urine often becomes alkaline and throws down crystals of triple phosphates and other alkaline salts. An obstruction, such as an enlarged prostate or a stricture, for instance, favors calculus formation by causing alkaline fermentation, and by retaining crystals or small concretions which a healthy bladder would expell.

Why are bladder stones more prevalent in some countries and localities than in others? In the case of Porto Rico, Egypt, and other tropical countries where this affection is so common I am convinced that Bilharzia affections are prime etiologic factors. The desquamation of epithelium in the Bilharzia bladder is very profuse. In over ninety per cent of my series of Porto Rican cases I found unmistakable evidences of Bilharzia disease; but at no time have I been able to demonstrate the presence of the Bilharzia egg in the nucleus of the stones as claimed by some investigators. Again in these Porto Rican cases I found the stones to mostly consist of exalate of lime. My patients were mainly from the laboring classes, and existed almost exclusively on vegetables. I therefore infer that the oxalic acid contained in these vegetables had some connection with the oxalate of lime stones.

Why is it that in certain countries (Italy, Russia, India, and Turkey) the subjects of bladder stone formations are mostly children, while in others, the middle-aged, and in others (Germany and Austria) elderly persons are the principal victims? Why do the same factors not form similarly composed stones? These unanswered questions show us that we are still very far off from a complete knowledge of all the various causes and manifestations of urinary calculus formations. Here is still a big field for the pathological chemist, the bacteriologist and the pathologic anatomist to investigate the pathogenesis of vesical calculus—and likewise a field for the physician and surgeon to elucidate the etiologic factors of this condition. In spite of strenuous efforts made in the last decade we must admit that the causation of bladder stones is a very manifold one, and that there are still a number of etiologic factors unknown to us. In truth "the knowledge of today is the ignorance of tomorrow."

If there be any value in my feeble efforts on the etiologic and pathogenic

factors of bladder stone formation I would ask that you recognize it in the emphasis of the many problems which are still to be solved in this rather limited field of medical science. Many of the early investigators into the causation of stone formations have erred—yet even our age is far from the complete solution of even small problems.

I wish to very briefly consider a few points in the treatment of vesical calculus—and then I am finished, excused by the time limit given to each paper.

Medical treatment of this condition is only applicable in cases of acid lithiasis, i. e., uric acid or oxalic acid calculi; this consists of well known diet restrictions. The nutrition should be made as accurate as possible, so that the nutritive exchanges may result in the total elimination of the uric acid; bodily exercise, hydrotherapy, dry friction and massage all greatly help to this end. Alkaline medication is also essential. The various lithontriptics I have found to be valueless in the dissolving of vesical calculus.

The logical treatment of all cases of vesical calculus is surgical. The choice of operation depends largely upon the condition found, and no routine operation for all cases can be advised. There are three valuable radical measures:

- (1) Urethral Dilation,
- (2) Litholapaxy, and
- (3) Cystotomy.

Urethral dilation is applicable in females only. In the female the urethra is short and easily dilated, and the technique is simple. The patient is placed in the lithotomy position, and under complete anaesthesia the urethra is dilated by inserting first the little finger and then one of the larger ones. I never use anything but my fingers for this, for I can then easily judge of the tension produced and avoid rupture of the sphincters. If the stone is found to be too large for delivery it can generally be easily crushed and removed with a pair of long, slender dressing-forceps. Aspiration of the crushed calculus is not necessary as in the female large pieces are spontaneously evacuated. The absence of a fundus in the female bladder, where fragments may collect, removes the danger of another stone forming with a fragment as a nucleus.

Litholapaxy is a very simple operation and devoid of danger when properly carried out. The post-operative convalescence is reduced to two or three days without the patient suffering any pain, without incontinence, and without dressing and the patient will often accept it when he would refuse a cutting operation. This operation has its limitations, but generally speaking it is the best mode of treatment when the calculus is friable and of medium size.

In all of my Porto Rican cases I was forced to resort to cystomy—colopocystomy in the females, and the suprapubic operation in the males—because of the hardness or size of the stones found. The vaginal route in the female is made quite easy because of the anatomical position of the bladder. All that is necessary is to introduce a grooved male sound through the urethra, press down the lower wall of the bladder and incise in the median line, beginning back of the vesico-vaginal septum, extending the incision with the sound as a guide for four or five centimeters. This will give sufficient space to remove a good sized stone as considerable dilation is possible. Drainage can be continued by this opening, if needed, or the opening can be closed by the usual technique employed for vesico-vaginal fistula. This incision has a tendency to close quickly and fistula is rare.

The supra-pubic cystotomy presents no difficulties, the incision does not

transverse important parts. I have not seen a fistula following this operation. If the operation is complete and all obstruction removed from the neck of the bladder there will be no excuse for fistula. I have used the "transverse and longitudinal" incision advocated by Refin, Kustner and others, and have found it to be very satisfactory in a certain number of cases. In the supra-pubic operation I generally use a $\frac{7}{8}$ -inch drainage tube for the first two days, and also place a small piece of gauze in the angle of the opening to prevent infiltration of the prevesical space. I suture the wound around the tube, and irrigate the bladder through it once daily until removed, and then through the fistula until it closes.

Each of these operations has its advantages and its indications. The urethral dilation, for instance, is not possible in children, or very elderly women because of the rigid urethra. With litholapaxy, in the male, fragments are apt to be left in the bladder, to become nuclei for other stone formations, especially in a sacculated bladder, or a bladder with rough walls.

I have not considered the perineal operations as I have had no personal experience with them. I have always been afraid of jeopardizing the seminal ducts, or of causing incontinence of urine by division of the sphincters.

The supra-pubic operation is my preference for the greatest number of cases, but this operation has its enemies, and by some has been condemned as useless. McGowan of Los Angeles said to me at one time that this operation was uncalled for, that no stone was too hard or too large to be crushed by the lithotrite, and Keyes says that he has not met a case that could not be removed with the lithotrite. But I strongly doubt, gentlemen, if either of these men could have removed this specimen which I present today, with the lithotrite. Such a procedure would at least have spoiled a very pretty specimen. This stone I removed from a seventeen year old boy in Porto Rico, who, by the way, had been treated for "gonorrhea" before he fell into my hands. This specimen weighs seven ounces; its greatest length is three and one-half inches; width two and a quarter inches; greatest circumference, eight inches; shortest, six and three-quarters inches.

Read at the Roswell Meeting, 1909.

REPORT OF TWO CASES OF HODGKINS DISEASES.

By B. F. STEVENS,

EL PASO.

Several interesting and rather uncommon features in connection with the following cases serve as a sufficient excuse for placing them on record.

CASE I.

Male; age, 26 years; height, 6 feet 2 inches; weight, 200 pounds; occupation, farmer.

FAMILY HISTORY. Not obtained.

PERSONAL HISTORY. Has never been sick. Was sent from Kansas to El Paso, because of a suspected pulmonary tuberculosis.

PRESENT ILLNESS. Began three months ago with cough, dyspnoea, some oedema of face, neck, right arm and forearm; no loss in weight.

PHYSICAL EXAMINATION. Well nourished; some oedema, as

above stated; face slightly cyanotic; two or three enlarged glands in the axilla.

CHEST. Moist rales over bases of both lungs. On percussion, median line of chest was flat, also right apex.

ABDOMEN. Negative; spleen not enlarged.

Expectoration, clear; no T. B.'s present.

Urine negative; blood negative; red blood count, 4,800,000; whites, 7,200. No nucleated reds. Tuberculin test not made.

Temperature ranged from 98 to 101 degrees, irregular.

He was put on arsenic and given X-ray treatments, and advised to return home, as climate would in no way help him. Patient died one month later. No postmortem.

CASE II.

(Occurring in the practice of Dr. Arch Dixon, Jr., with whose permission I am able to report it.)

Female; aged 26 years; weight, 127 pounds; height, 5 feet 6 inches.

FAMILY HISTORY. Three brothers tuberculous, one dead, two living and fairly well; one sister, also probably tuberculous, living.

PERSONAL HISTORY. At the age of 15 patient developed enlarged cervical glands on right side, at which time they were mistaken for mumps. These would enlarge only to again subside without any special treatment, and were later on thought to be tuberculous. They caused her no special inconvenience. Six months ago they began to enlarge more than usual, and she lost some weight. She was put on tuberculin, beginning with 1/10,000 mg. doses, gradually increasing; also given eggs and milk in addition to her regular diet. The tuberculin seemed to increase her discomfort, and so was discontinued.

She then consulted a quack, who massaged the enlarged glands, also inserted a seton in one of the largest ones. They then began to grow to immense size, extending from the mastoid to the outer end of the clavicle. They were discreet, and seemed to fluctuate on palpation. Patient also had difficulty in swallowing, the right arm became oedematous, and a number of glands on the left side also became involved, though not to any great extent. She also began to run an irregular temperature.

She then returned to Dr. Dixon, and upon his direction I excised a piece of one of the glands. Dr. E. R. Le Count, of Chicago, who examined a specimen microscopically, pronounced it characteristic of the changes found in Hodgkins Disease. The patient was then put on Folwer's Solution, together with the X-ray. Four months after beginning treatment the neck had gone down six inches in circumference; the temperature rarely goes over 99 degrees.

Periods of quiescence occur in this disease, only again to light up with renewed vigor. The blood findings in this case were negative, as were also the ocular and cutaneous tuberculin reactions.

EXAMINATION OF CHEST. The R. opex was dull on percussion with diminished respiratory murmur.

The spleen was not greatly enlarged.

PATHOLOGY. Pseudo-Leukaemia is characterized by enlargement of the lymph glands and other adenoid tissue, without much increase in the number of leucocytes. It occurs most frequently in the first half of life. Three-fourths of the cases occur in males. Two-thirds of fifty fatal cases, reported by Gowers, ended in less than two years, averaging six to eighteen months. Death most often occurs from exhaustion, but may occur from pressure or starvation. The glands of the neck are most often involved, then follow the

inguinal, retro-peritoneal and mediastinal. It is a painless affection. The glands, as a rule, remain discreet, and do not become caseous or contain pus. Irregular fever is a constant symptom.

COMPLICATIONS: Nephritis, fatty degeneration of the heart, pneumonia and pericarditis.

The same changes are found in this disease as in Leukaemia. Microscopically we find first a great increase in the stroma, and later, a hyperplasia of the lymphoid cells. The picture is not characteristic, various writers asserting that it is a congerie of diseases, as tuberculosis, syphilis, sarcoma, leukaemia and malaria. Hektoen asserts that during life, it is impossible to make a differential diagnosis with the microscope between lymph-sarcoma and Hodgkins Disease. The blood shows no changes, unless later a secondary anaemia.

DIFFERENTIAL DIAGNOSES. From Leukaemia, Lymphosarcoma, Tuberculosis and Syphilis. The *blood picture* is very different in Leukaemia. No *malignant* growth has metastases occurring in one form of tissues only, as does Hodgkins Disease.

That it is a peculiar form of tuberculosis is believed by Sternberg, Crowder, musser and others. Tubercle bacilli may or may not be present, therefore tuberculin would be of negative value. Tubercular Adenitis may precede or accompany Hodgkins Disease in some cases. Syphilis, clinically could be ruled out by the use of mercury and iodides.

TREATMENT. Forcheimer, 1909 Edition, says: Glands should be extirpated when seen before they are greatly enlarged. He also advises use of X-ray to the spleen and affected regions.

Holding and Warren collected 22 cases treated this way, of which 27% were cured symptomatically; 59% were improved; and 14% were unimproved or died. They do not state the time cases were under observation.

REMARKS.

CASE I is of interest because of its intense malignancy, death occurring from pressure four months after onset of first symptom; also because of primary involvement of mediastinal glands. There was apparently no tuberculosis. The disease in this case resembled sarcoma, for which it could well have been taken. That the lung symptoms were due to pressure was apparent, because of the clear character of sputum, cyanosis, acute onset, and previous good health of patient.

CASE II is still living five months after diagnosis was made. There has been a marked improvement since using Fowler's Solution and the X-ray. This patient had no temperature and only the original glands were enlarged, and they not markedly so, until the quick inserted the seton and used the violent massage.

The diagnosis in this case was confirmed by a competent pathologist, as well as finding the glands not caseated on section. The peculiar thing about this case was that the original glands stayed enlarged, but no others became involved, a most unusual thing in Hodgkins Disease. Also she had no fever until after the use of the massage.

The length of time the disease has existed is also worthy of note, having been more or less quiescent for ten years, only to be lighted up by violent treatment. The left side also became involved at this time. Because of the long time those enlarged glands had existed and also her family history, a diagnosis of other than tubercular adenitis was not thought of.

That the X-ray and Fowler's Solution do good, there is no question, but

whether the improvement will continue and prove lasting is open to serious doubt.

THE USE AND ABUSE OF TUBERCULIN.

ROBERT SMART, M. D.,
ALBUQUERQUE.

Tuberculin was first brought to the public notice by Prof. Koch in 1890. At that time he wrote that he thought he had perfected a remedy, which if given properly and to selected cases would be of great benefit to them. Unfortunately, at that time, tuberculin was hailed as a sure cure for all cases of tuberculosis and little regard was paid to Koch's admonitions as to the selection of cases or to the doses which he advised. In consequence of this it was administered right and left in all cases from the first stages of the disease to those in extremis, in large and constantly increasing doses, causing thereby the most appalling reactions and increasing, in many cases, the ravages of the disease.

This had, as might be expected, in a very short time, the effect of causing tuberculin to fall into bad repute and to offer to inject tuberculin into any patient for the cure of tuberculosis, was equivalent to the loss of the patient to the doctor giving such advice. And so for about 12 or 15 years the use of tuberculin was given up entirely except by a very few men who had the wisdom to follow explicitly the general plan for its use laid down by Prof. Koch. These men, notably, Trudeau, Petruschky, Von Ruck and Spengler, found that they obtained beneficial results in many of the cases in which they used it and the longer they used it the more familiar they became with its power for good and harm. Gradually others began to use it again, but now, knowing it an agent of real danger if incorrectly used, they were not so reckless and following the directions given by those experienced in its use, they, too, began to get results, until today tuberculin has again come into a well-deserved popularity with the leading men of the profession, both in Europe and America.

PREPARATIONS OF TUBERCULIN.

Some difficulty is perhaps experienced by those busy men of the profession who have not been able to keep in touch with the rapid progress made recently in biologic therapy regarding the many different kinds of tuberculin.

Practically they may be divided into two classes, viz.:

- I. Filtrates from the tubercle bacillus, and
- II. Those containing the killed bacillus.

The filtrates were the first to come on the market and their supposed action was believed to be a sort of tubercle autitoxin.

Later, Koch, by experiments, showed that by injecting the bodies of the dead tubercle bacilli into animals having tuberculosis that he increased the agglutinating power of the blood in those animals and this gave rise to the second general class of tuberculins, viz.: those containing the dead bodies of the bacilli.

Of the first class the best known products are Koch's Old Tuberculin, Denys' Bouillon Filtrate, and Von Ruck's Watery Extract. These all differ in their manufacture, but are alike in that all of them have the bacilli removed in one way or another.

Koch's O. T. is made from a culture grown on 5% glycerine bouillon;

these are killed by heat, centrifuged, filtered, through paper and then through a Berkefeld filter. The result of this process is then vaporated to one-tenth of its original volume and again filtered. It contains the excreted products of, but none of the bacilli.

Denys' B. F. is made like the O. T. The bacilli are grown for some weeks on glycerine bouillon. The bouillon is decanted from the tubes and a small percentage of trikresol added as a preservative and then it is filtered through a Berkefeld filter to remove the bacilli. The main difference between these two products is the heating of one of them. Denys claims that by heating, some very sensitive immunizing substance contained in the filtrate is destroyed.

Von Ruck discards the culture media and makes a watery extract from the bacillary bodies, but does not use the bacilli themselves in the injection.

The best known products of the second class—those containing the bacilli—are the T. R. and the B. E.

In Tuberculin Rest (T. R.) the bacilli are grown on glycerine bouillon; are filtered through hard sterile paper; frequently washed and the residue dried in vacuo. It is then pulverized by grinding, suspended in steril water and centrifuged. The first supernatant water from this process is discarded and the residue put through the same process of grinding and centrifuging again; this liquid is poured off and kept. The process is repeated again and again and the liquids kept each time until the bacilli are entirely disintegrated and their cellular wall so finely divided as to give the fluid only an opalescence. This is then standardized so that each cc. represents two milligrammes of the solid substance. This product therefore contains the soluble parts of the disintegrated bacilli in solution and the minutely divided cell wall in suspension.

The Bacillen Emulsion (B. E.) is made approximately in the same manner as T. R., but standardized so that one c. c. equals five milligrammes of the solid substance.

Strictly speaking, the T. R. and B. E. are not tuberculins for the reason that all tuberculins, under whatsoever name, are prepared from the culture liquids, while these two products, containing the killed bacilli, are more properly speaking tubercle vaccines.

Von Ruck's product would appear to occupy a position between the two, since he discards the culture fluid, which theoretically would exclude it from the tuberculins; and he does not use the bacilli, which prevents it from being a vaccine. For this product he claims a lessened toxicity, due to the exclusion of proteids from the culture media and a more easily managed scheme of dosage, since in those products having bacterial particles in suspension, there is danger in the proper regulation of the dose due to clumping of the bacterial particles.

One other tuberculin should be mentioned in passing, i. e., that of Spengler, made from cattle suffering from "Pearl disease," a true bovine infection.

From a practical standpoint, however, there is little to choose between all of these preparations. So little is actually known as to their action in tuberculosis that the advantage claimed for one over the other are perhaps more fanciful than real. The best men in Europe and America are some using one and some another of them and the results so far obtained do not speak for any one any great superiority over the others.

THE ACTION OF TUBERCULINS.

Regarding the action of these products little is actually known; our knowledge of their use is purely empirical. This may readily be emphasized by the

grounds taken by two such authorities as Prof. Wright who, using the tubercle vaccines on the same principles as he uses vaccine in other specific infections, believes in the homologous action of these products; and that of Spengler, who holds that human tuberculosis is best treated by means of bovine tuberculin; while the bovine infection responds more readily to tuberculin of human origin. In this connection it may be added that there is still much controversy as to the diagnosis of human from bovine infection. The majority of writers claiming that the statement that glandular, bone and mesenteric tuberculosis was of bovine and chronic pulmonary human origin, is as nearly correct, as any differential test yet brought to light.

Two theories in regard to the action of tuberculin, which are at present holding the center of the stage are: 1. The vaccination theory and 2. the toxin immunization theory.

The vaccination theorists claim that tuberculin, by stimulating all the defensive mechanisms of the body brings about an immunity to the tubercle bacillus itself and thereby modifies the local disease.

Toxin immunization claims much less for tuberculin. Those holding to this theory believe that tuberculin treatment is productive, in the tuberculous patient, of an immunity merely to the toxic products manufactured by the tubercle bacilli and that it benefits the local disease process, only in so far as it diminishes one of the factors of the disease, which tends towards lessening the resistance of the system to infection. There is no specific immunity produced by the injections. We improve the patient's general condition by neutralizing, so to speak, the toxin of the bacilli and the healing of the specific lesion is brought about by the natural defensive resources of the organism.

Toxic immunization seems to be the more plausible of the two theories and it has its basis founded on the fact that when you improve the general systemic condition in chronic disease, you also increase the defensive mechanism of the organism as exemplified by the increase in phagocytosis, agglutins, precipitins and opsonins: these having a specific action on the local focus of infection.

That this is based on fact, is well seen from the improvement in the patient's local and general condition as the increased tolerance to tuberculin is established.

Tuberculin tolerance may be increased many thousands of times in some cases, by the gradual, almost infinitesimal, increase in dosage with tuberculin. Reaction, general or local, have no place in the treatment and the tuberculin experts, using the product under this conception of its action, strive to attain the limits of the patient's tolerance without provoking a reaction of any sort.

In tuberculin treatment each patient must be looked upon as an entity. To tuberculin, no patients react alike, and therefore the desire must never be to attain the largest dose of tuberculin in the shortest time; but to gradually increase the dose without reaction until the point of the patient's tolerance to the drug is established.

Time is the greatest factor in the treatment; six months is probably the shortest time in which tolerance may be accomplished with any patient and Trudeau says it is much safer to take a year if need be.

No dose may be arbitrarily stated, as the maximum in order to produce the limit of tolerance; because of the different degrees of sensitiveness of individuals to tuberculin; while one may show intolerance at one milligramme, another will not do so until ten times that amount is used.

The size of the dose of tuberculin is of little consequence, because the ratio

of improvement, in the tubercular condition, is in no way proportionate to the size of the dose used. The object to be kept in mind at all times is, irrespective of the size doses given, to gradually increase the dose without reaction, to the point of the patient's tolerance.

If too large doses are given, i. e., if the increase in dosage is made in too large jumps this tolerance, which is manifested by local and general reactions of more or less severity, will be reached very quickly; but by imperceptible increase in dosage it may be carried on for a long time before any reaction is noted; and a much larger dose will be tolerated than that which brought about a reaction in the first place.

In speaking of the uses of tuberculin, I believe that by far its most important role is as a diagnostic agent in tuberculosis.

Time will not permit of an extended discussion of this subject and in a subsequent paper I hope to show the results of some experiments with tuberculin in the diagnosis of tuberculosis which I am working on at present.

As a therapeutic agent, tuberculin has been used for years and has proven itself a valuable adjunct to the treatment of the disease in the same manner as has sunshine and fresh air. It has no specific action on the tubercle bacillus; in this it has failed us; but in giving us a reliable method of early diagnosis in any form of the disease, it has more than proved its worth to the profession.

I look upon it as almost a piece of criminal negligence, to wait for unmistakable physical signs of tuberculosis or for microscopical evidences of the disease as proven by the bacilli in the sputum, before pronouncing or beginning treatment for tuberculosis.

With the tuberculin-aids to diagnosis, evidence of tuberculous troubles can be reliably and unmistakably shown long before the bacilli appear in the sputum or before there are physical signs which would draw attention to the disease.

These tests are so simple of performance, so easy of interpretation and so free from baneful effects to the patient, as to recommend them to all physicians.

There are four tuberculin diagnostic methods in use:

1. Injection into the tissues of relatively large doses of tuberculin.
2. Instillation into the eye of small or weak solutions of tuberculin.
3. The percutaneous or vaccination method, and
4. The cutaneous or inunction method.

Of these, I should discard the first on the grounds of pain to the patient; the bad effects of the general reaction produced; and the relatively long time it takes to get results. The diagnosis depends upon obtaining a general reaction, as shown by an elevation of a degree or more of temperature over that ordinarily present. This necessitates taking the temperature with exactitude for a week or more before the test is made.

The eye reaction is more or less dangerous. In two of my own cases I have had very severe inflammatory reactions and as the results are in no way superior to the following less dangerous procedures it would seem advisable to discard this in favor of one of the following.

The percutaneous method of Von Pirquet is free from danger, easy of performance, does not incommode the patient and in the great percentage of cases reliable. Its one fault seems to be that in a small number of cases positive reactions are recorded which might not be tuberculosis. Whether these cases have at the moment of application of the test a very slight infection it is very difficult to say—theoretically—they have and it is more probable that there is.

infection which never shows in any other way on account of the body defences being quite able to cope successfully with the infective agent.

The Moro or cutaneous test has the advantage of the others of being absolutely without pain in its application; more certain in its results and presenting no complication whatever.

In over a hundred cases in which I have used it, the worst that has ever been complained of was a little itching at the site of the inoculation, especially in hot weather.

I believe that within a very short time, that insurance companies will require the use of the Moro test in all cases in which there may be the slightest possibility of tubercular disease.

There are cases coming to us every day in which there can be no doubt of the presence of tubercular infection; there are also those in which one may be almost as positive that there is not tuberculosis; but between these two extremes there is a class, numbering the great majority of cases, in which there may be a doubt and it is in these cases that I should strongly recommend the use of the Moro test as a confirmatory sign one way or the other.

To my mind, it is in these cases that tuberculin plays its most important role; as it is these cases that escape correct diagnosis; it is these cases which go for months or years with a diagnosis of chronic bronchitis, bronchial asthma, neurasthenia or "general run down condition" and it is these cases, if properly diagnosed and properly treated, that give, in the majority of cases, permanent cures.

THE USE AND ABUSE OF SURGERY.

By W. C. BUCHLY, M. D.,

ROSWELL, N. M.

All of the departments of healing art have had more or less approbrium cast upon them by the ignorant, the unscrupulous and the grafter.

Surgery escaped this more than her sister branches; until a comparatively few years ago, owing to the skill required and the danger attending the major operations; especially before the days of anaesthesia did it require a man of iron resolution and great decision to be a surgeon; but since anaesthesia has become a matter of course and more especially since the knowledge of asepsis and antisepsis have reduced the danger to a minimum, the grafter has found his opportunity to get in his work and build up a quick reputation, and rake in the denero.

When Battey inaugurated the wholesale removal of ovaries for any and every real or imaginary pain in the ovarian region; like Sir Isaac Newton's little dog Fido, "Little did he realize the mischief he had wrought."

Could he have with prophetic vision looked into the future and seen the thousands upon thousands of unsexed nervous dispondent, hysterical creatures, who were to become victims of the measures he advocated; no doubt he would not have promulgated his theories, for Battey was probably an honest man, who was entering into a comparatively new field and did not have the proper data or experience to enable him to realize the danger.

Following his teachings a large number of inexperienced and untrained operators were fired by an ambition to make surgical reputations for themselves and proceeded with a zeal worthy of a more enlightened cause, to remove

ovaries without restraint and in too many cases without scruple.

Fortunately, time and experience have put Gynecology on a more rational basis and it is only the densely ignorant doctor or the professional grafter who removes ovaries which are healthy, otherwise than in a neuralgic condition.

Another rich field for the grafter, which is being well exploited at the present time is appendicitis.

Now, right here I do not want to be misunderstood, for I believe in operating for appendicitis and I fully believe that when one has a diseased appendix, he is not safe until the offending organ is removed..

There is no condition in the domain of surgery, probably, which is so uncertain and treacherous as this affection and none which keeps the surgeon more anxious until the case is operated upon: however, to jeopardize the life of a patient, just because he happens to have a neuralgic pain or one caused by myalgia or some other trivial affection; to hurry him to the operating table, so as to not allow him a few hours to recover: well scared into the belief that he has a very dangerous form of the affection, may build up brilliant reputations as surgeons and help very materially to obliterate the unseemly flatness of one's pocketbook and even finally make skillful operators; but it hurts honest, conscientious, useful surgery and in time it reacts on the unscrupulous operator himself.

Lincoln's familiar remarks about fooling the people holds good here as in other cases.

Even when we have a genuine and not an imaginary affection I do not believe in operating on every case, when it first comes under our notice.

I believe it is a good rule to operate on every case, which comes to our notice within the first forty-eight hours and in some cases even later; when, however, the disease has lasted three or four days or more before it is seen and seems to be progressing nicely, I believe it is better surgery to wait until the infection is walled off, or if possible for an interval operation before removal, at least this has been my experience.

A use that surgery was put to, which was somewhat more amusing and less harmful, than those described above, tending to show the credulity of a good proportion of people, came under my observation in my early days of practice in a town, which had in a few months boomed from a place of about a thousand to one of four or five thousand people.

A young man who had a month or two before graduated from a summer school of very poor reputation, having a four months session and a two year course, made quite an extensive reputation for himself, owing to the vivid description he gave of the numerous difficult major operations he had performed; but he very wisely rested on his past laurels and did not jeopardize his easily won prestige by attempting any except the most minor ones there, and to my personal knowledge he could not find time to continue in attendance on two cases of abortion (not criminal ones) after they became interesting. How he would have finally wound up I do not know; for the advent of an epidemic of Yellow Fever caused him to make a hasty and unceremonious exit from the town.

His explanation to me of his departure was that he was sick with chills and fever. He said that he had had his chill at one that day and the fever would follow about four that afternoon.

It would be very easy to adduce other forms of graft or incompetence in

surgery: as for example, the removal of the Uterus for some minor affection as laceration, endometritis, version, etc.

This undoubtedly removes the offending lesion, and possibly removes the patient from the trials and vicissitudes of this world; so does amputation of the leg remove an in-growing toe nail and would be about as justifiable as the former operation.

The physician may be guilty of sins of omission as well as of commission. We may have a case of cancer of the uterus more especially of the body and the only early symptom may be hemorrhage either a menorrhagia or a metrorrhagia. To let a case of this kind go on month after month, after using some palliative treatment, calming the fears of the woman and her relatives, with the assurance that it is only the change of life and in a few months or a year or so, she will be all right is reprehensible practice.

The woman may not have a cancer and in truth the menopause, amendometritis, fibroid, or some other cause may be at the bottom of the bleeding; however, the danger of cancer and the favorable prognosis after an early operation entitles her to a curatage, a microscopical examination of the specimen and a prompt operation if our fears are verified.

We can pursue no other course in justice to our patients and ourselves. It will be a happy day for womanhood when the laity and the profession can be brought to the realization of the necessity of prompt and early action in these cases.

Another class of cases, which often prove fatal, where life might be saved by timely operation, is infection of the gall bladder and the lodgment of stones in the biliary ducts. Simple catarrh of the ducts is a comparatively common affection and it is easy to mistake a case of it for the more serious affections. Especially as the diagnosis is not always easy to make in the early stage.

A case came under my observation a year or so ago, in a lawyer past middle age, who had had a marked jaundice for several months, with pain in the region of the gall bladder. He was quite emaciated and weak. He had consulted several physicians, no one of whom had made the correct diagnosis; finally he was advised to make a long trip through the country in a wagon. I told him that operation was the only thing that could help him and did not hold out any great hopes to the family of any benefit from that, in the condition he was then in. He was operated on in Fort Worth by a surgeon, who was a friend of the family. Several stones were found in the gall-bladder and one or more occluding the common duct. He died a few hours after the operation. A timely operation would probably have saved him to support a large and dependent family.

Recent investigations and discoveries have placed the surgery of the stomach and intestines on a sounder basis, and it behooves us to be on the watch for cancer of the stomach in its early stage; while operation holds out a considerable hope of relief and to be ready to operate on cases of ulcer, which have proved intractable to medical treatment.

I might mention many other affections of the different organs, where the modern methods of diagnosis render it inexcusable for the practitioner to allow the sufferer to drift into a fatal condition for want of a timely operation.

It was but a little over twenty years ago that I saw one of the most eminent surgeons in New York remove a kidney from a girl, which the autopsy showed to be fairly healthy, while the one left was badly diseased. This would have been inexcusable at the present time.

It is an unfortunate fact, that a goodly proportion of people have an inordinate dread of anything that savors of operation. This is due to several reasons.

The first is the natural innate dread of being cut in any way. This we will always have to contend with to a greater or less extent.

Another reason is that the period is not far remote when an operation was looked upon as the court of last resort by the laity and most of the profession and only to be undertaken when the sufferer was in such a condition that the chances for recovery were very slim and of course surgery got the whole credit for the death.

The grafter in his mad desire for money and notoriety, who operates on every one who is unfortunate enough to fall into his clutches, is also a potent cause of distrust.

Popular literature by the jokes, usually cheap ones, which it gets off at the expense of the surgeon adds its quota.

In our opinion, surgery does not command the respect and confidence on the part of the laity that its importance in the saving of life and the prevention of invalidism entitles it to and it behooves us to teach the people, that the mechanical wielding of the knife is only a small part of surgery and only one, who is trained in surgical diagnosis and who is possessed with a professional zeal and conscience, which will prevent him from operating on a case, until he is fully convinced it is for the best interest of the patient so to do, is entitled to be considered a surgeon.

When this is done surgery will come into her own and thousands of lives will be saved to the world and many more will be snatched from an invalidism and suffering, which is worse than death itself.

Read at the Roswell Meeting, 1909.

CLIPPINGS

THE HEART IN TUBERCULOSIS.

Pottenger has recently pointed out (Archives of Internal Medicine, 1909) that a relatively low blood pressure exists in tuberculosis, especially in advanced cases, owing to the effect of the toxins on the vasodilators, the weakness of the heart muscle and general wasting. He declares also that myocarditis is a condition frequently encountered in advanced tuberculosis and one which, if recognized, will yield to appropriate treatment in many cases. The use of Digalen, as a reliable form of digitalis, here suggests itself. The restoration of venous tone exerts a favorable influence upon metabolism and nutrition, with obvious benefit to the patient. The suggestion is one of great importance and should be put to the test. No doubt the cure of cases of tuberculosis which are not far advanced can be materially hastened with the aid of Digalen, by which the advanced cases may be strikingly benefited.

BACTERIOLOGY OF THE BLOOD IN CONVALESCENCE FROM TYPHOID FEVER.

Coleman and Buxton, *Jour. Med. Research*, 1909, elaborate their original theory. The infection enters the body through the lymphatics of the intestinal wall. Thence the bacilli invade the general lymphatic system and spleen, where they grow chiefly, and where relatively few bacilli are destroyed. A few may filter through into the blood during the incubation period. When the development of the bacilli has reached a certain grade they *overflow* in quantity into the blood, where they are destroyed and their toxins set free. The symptoms represent the reaction on the part of the patient. If the case progresses favorably the growth of the bacilli in the organs is gradually controlled by the immunity processes; fewer bacilli are discharged into the blood; the symptoms lessen in severity. If the progress is unfavorable the growth of the bacilli in the organ proceeds unchecked.

About the time of defervescence the bacilli practically disappear from the blood. After the original fever is ended, if there is an intermittent temperature it is probable that the growth of the bacilli has not been completely checked and that a few are still being discharged into the blood. When the spleen remains enlarged after defervescence and a relapse occurs it is probable that complete immunity has not been established. The late appearance of local suppurations suggests that the general recovery has not conferred local immunity.

DEFINITIONS AND SYMPTOMS.

Until the recent work of Searcy in Alabama and the epoch making studies of Babcock in South Carolina pellagra had been practically unrecognized in this country; while it has been known and studied for nearly two centuries in the

countries of Southern Europe and the East, under the various names of Mal de la Rose, Mal de Misere, Mal de Sole, Rispola Estiva, Erythema Endemicum, Lombardian Leprosy, Mal de la Spienza, Mal del Padrone, Baldrone, Elephantiasis Italica, Dermatagra, Maidismus, Psychoneurosis, Maidica.—*Exchange*.

PERCUSSION OF THE LUNGS.

Dayton states that there is no fixed note corresponding with the term pulmonary resonance; but each individual chest has its own standard tone which should be determined before drawing conclusions as to the existence of pathological conditions. In comparing two tones, the ear more readily recognizes a change from normal pulmonary to impaired resonance than a corresponding increase of resonance from impaired to pulmonary. In simply comparing the notes over symmetrical points on the two sides of the chest, an observer may easily overlook symmetrical impairment of resonance or slight impairment on one side as contrasted with more marked dullness on the other. It is, therefore, important also to percuss each lung independently, especially in cases in which one lung is obviously abnormal. It is of particular value, in order to determine the limits of a pulmonary lesion, to find some portion of the lung over which the tone may be considered the standard pulmonary resonance for the individual chest, and then to percuss the chest both upward and downward from the site of such a normal resonance, so as to approach the dull areas from the normal, whether the former are at the apices or at the bases.—*New York Medical Journal*.

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EDITORIAL

THE TUBERCULOSIS BACILLUS IN THE CIRCULATION.

The matter had rested entirely on this hemisphere, with the exception of an excellent article by the pen of Surgeon Wright of the Naval Sanatorium, which article, like a former one, is based upon the fact that tuberculosis is primarily a bacillemia.

The editor of the J. A. M. A. handed us an Ukase in which he, by the stroke of pen, attempted to do away with the serious work of authorities in Europe and the work on this hemisphere done by Rosenberger and Foster, not to talk about the small fish like Pest and others. It is strange, and it indicates a very limited horizon, that a man, the editor of the largest medical journal in this country, should simply condemn the outcome of research and pass upon it without thorough knowledge of the literature on the subject and, when proofs came overwhelmingly, to hesitate to take up the matter editorially again and review both sides with fairness and logic and give a review of the complete literature.

Holmes and associates came out with a modified refutation. They cover themselves behind statements, which would be practically nothing else than adoption of the belief in spontaneous creation. Otherwise the presence of bacteria in the condensation of steam would be impossible.

In Europe the presence of the TB in the circulation was never seriously doubted and a very valuable contribution by the pen of Schlimpert about the investigations made in Schmorl's Institute increases the reports materially of positive findings. Schlimpert was able, in the majority of cases, to demonstrate the tubercle bacilli or tubercular lesion in the placenta or the decidua. It is true that all of his cases were beyond the first stage, but this does not change the issue. The frequency of the presence of the TB in the placenta is explained by nature's attempt of prevention by trying to retain the TB on their way to the fetal circulation.

In addition to this material Schlimpert gives us the findings in four women who died before parturition, where the TB existed in the fetal circulation and in the placenta. He also reports one case from the Woman's Clinic in Freiburg, where he found the TB in the blood of another parturient woman. At the time of the report she was still living.

These investigations, as well as the work of Grafenberg, which we shall mention under a different heading, tend to prove the Rosenberger-theory.

—F.

MENSTRUATION AND ITS RELATION TO TUBERCULOSIS.

It is well known that the normal catamenia is preceded by certain physiologic and psychologic processes which in the normal woman pass by unnoticed and only the catamenia itself is the sign of menstruation. The physiologic part consists in changes of the cellular constitution of the blood by increase of the erythrocytes, just before the flow, and the pressure of the volume is reduced from 10 to 20 mm. with the lowest pressure on the second day of the flow (Tsudi). The slight loss of blood can not be considered as causative of the change in the pressure, because it precedes the flow. It remains then only to adopt a chemic reaction due to internal secretion of the generative glands; most likely this would be ovulation. While in the normal woman these internal changes pass without notice a serious organic disease like the bacteremia of tuberculosis is apt to influence these processes to become pathologic. The normal woman has no dysmenorrhea. Menstruation with her is a normal function, noticeable only perhaps by oscillation in her psyche and the flow; that is all. Frequently organic lesion explains the presence of dysmenorrhea. Often we deal with a so-called primary dysmenorrhea. We call it so in the absence of an etiologic factor. So far most of such cases show more or less infantilism of the generative system. Contrary to expectation, the natural impulse may be exaggerated without the individual being conscious of same (in the sense of Freud).

These cases, which so far have puzzled the medical mind, become now more amenable to science. We know the changes in temperature of the tubercular in connection with menstruation. We know about the premenstrual fever, which slight as it may be, if often is the very first warning to the alert practitioner. We know also that frequently the temperature sinks to subnormal and then the pressure decreases. Grafenberg now brought system into this vague knowledge. He has stepped into untrodden regions. He has found a connection between the primary dysmenorrhea and tuberculosis. In these cases the tuberculin reaction is positive. He suggests, in place of the severe local treatment, a scientific course with tuberculin.

If Grafenberg's views are right a new field of success is opened. Not only many cases of dysmenorrhea will be cured but at the same time the causative moment of the tubercular bacteremia. This will explain more. It explains why pregnancy and childbirth is so frequently followed by tuberculosis. It must prove that pregnancy and childbirth does not produce, but stirs up a latent infection. This old myth has to go. Nature cannot have made the final aim of womanhood—"Life"—a danger to mothers. Nature cannot have given illogically to woman the wonderful impulse which leads her to her instinctive subjection. Nature will not make a normal woman under normal conditions fear its own plan. It is nature's plan that, in spite of the bitter taste of the fruit of knowledge, woman is not dismayed by the pending torture and the infelicity of her painful lot. We deal here with the basic sense of the creative instinct.

Let us forget the ancient and obsolete consolation, "In sorrow thou shalt bring forth children." The evolution of man has developed a finer phase of consciousness. Nature, which is logical in its laws, cannot have created a danger to life from the logic consequences of nature's strongest impulse.

Provided that specific treatment will bring about a cure, it would be folly to depend merely upon the reaction. Physical examination is necessary, but here again we are handicapped by the curse of social ignorance, a relic of me-

diaval superstition: false modesty and prudery. Let us look farther beyond the case-treatment. The problem becomes more difficult. Pragmatic rules do not apply. Shall nature take its course? Or shall we protect man against nature which means survival of the fittest by destroying the unfit, or shall we allow nature to do the act? Evolution has developed our psyche to the faculty of logical thinking; we can reach nature's aim without nature's crushing process. This leads us to the question of restricted procreation. But how? By curbing nature's strongest instinct? by intellect? This will not do in every case. By prevention? This may be a dangerous teaching. By destruction of the fertilized cell? This means violating religion and law. It is left to us either to accept the relics of mediaeval superstition or take upon ourselves the odium of advocating social reform in creed and law. Neither seems desirable. One way only remains open: platonic matrimony does not exist, therefore, let us advise and urge against procreation by those whom nature has marked as unfit. —F.

THE MORO REACTION IN TUBERCULOSIS.

Much has been written concerning the value of the different skin tests in the diagnosis of tuberculosis. Most men are wont to give them credit for what they may or may not show until in a recent paper in the J. A. M. A. a rather unjust criticism of the Moro test was made. The paper went on to say that no value whatsoever could be placed in a positive reaction. This, out of justice to the test, is highly unfair, and if given credence by any of the profession who are not familiar with the method, might be a means of hindering the early diagnosis of a certain number of cases of tuberculosis. I have used the test in a large number of cases in my sanatorium practice and have in every instance of a positive reaction been able to demonstrate the disease either by physical examination or by the finding of the bacilli in the sputum. As a control I have used the test on a number of non-tuberculous individuals and have never met with the least discoloration of the skin, much less the marked eruption mentioned in this paper. Never for an instant would I consider a negative result an infallible sign that the disease does not exist. Many times I have been so certain of an infection that in the absence of a positive Moro I have used the subcutaneous and been rewarded by a positive reaction. I cannot agree that merely because emaciation, cough, expectoration, bacilli in sputum and other characteristic symptoms do not exist that we must of necessity deny the presence of tuberculosis. Given a typical consumptive, and the average layman can diagnose the disease by a mere glance, but it is by these finer methods that we are able today to put all doubt aside and give the victim of the White Plague a far better chance for recovery than their unfortunate brothers who, not many years back, were compelled to wait until the disease had stamped the seal of death upon them merely because we physicians were unable to diagnosis the condition until it presented the typical picture of consumption. Let us not as physicians disregard the warning given by such tests as the Moro; for I doubt not that those who react and yet seem in perfect health will in the years to come develop signs and symptoms that will only too surely number them with the other vast army of healthseekers who today would thank God had they been fortunate enough to have given a positive Moro reaction. —L. S. P.

THOSE RESCINDED RESOLUTIONS AGAIN.

A strange thing has happened! Lydston sent out a circular letter in which he explains the reasons for the needed reforms. We like the tenor of his statements. They seem to be to the point. If the statements are true why the "rescinding of the resolutions" then? We cannot very well see that the C. M. S. should have taken action as such and then rescinded the same. It is very strange that matters, important as these, once passed upon, are done away with with so little ceremony. The Illinois State Secretary sent out a circular in which he implies that Lydston's letter refers to "soiled linen" which ought to be washed at home, and that proper light would be thrown upon the subject very soon. Whatever that light may be, we are anxious to see it. We cannot consider a demand for reforms in the management of the A. M. A. as "soiled linen" belonging to one component part of our great association. The matter interests us. We are members of the A. M. A. and what considers the A. M. A. in general considers us in New Mexico. It is time that the J. A. M. A. came out with a direct statement and not beg the question. The fact that the State Secretary acknowledges the need of a "washing,"—even if in the privacy of such a *small* medical family like Chicago,—looks bad. Do we have any assurance that the "wash" will not be a "white-wash"? —F.

PAY UP—KEEP PAID.

By CHARLES S. MOODY.

A few days ago I saw where some pseudo-philosopher said that the practice of medicine was a profession and not a business.

Now, that entirely depends.

If that fellow cut his baby teeth on a twenty-dollar gold piece, took his matitunal bath in rose water, and rolled through life in the lap of luxury, then to him medicine might be purely a profession; but to us who were compelled to erupt our dentition on the remnant of a cast-off rubber shoe, take our bath in the family washtub and eat when there was anything to eat, the practice is purely a business, and I may add, sometimes a mighty poor one at that.

I stand just as firmly on my Esculapian dignity as any man and at the same time the requirements of my growing family and my good lady who loves the good things of life as well as the next, make me hustle around and look after the business side of the thing.

I opine that this constant preaching of "profession" has done a great deal toward educating the people up to that standard where they remember to pay the doctor after all other obligations have been settled.

Just the other day an incident occurred that impressed me very forcibly along these lines. A man came in with the request that I go and see his wife. During our conversation he remarked that he owed Dr. M. (one of my colleagues) a large bill and that the lawyer had taken judgment against him. He concluded with, "Now, I will pay Dr. M. sometime, but his is the last account I intend to pay."

"No," I replied, "the last earthly account you will pay is only the anteroom to an account that you will spend eternity in settling, if what the Bible says it true."

I could not attend that man's family. It was purely a matter of business. Had I permitted sentiment to influence my judgment I should have grabbed my little old brown bag and strained a tendon getting out to that house.

That man is not poor. His credit with the butcher and baker is first class. I have seen his wife behind her span of bays, robed in Worth gowns, speeding up the street, the envy of half the women in town.

I have seen Dr. M.'s wife, with her bairns by her side, strolling along the lake shore, her dress of the very plainest. I remember these things and when he told me that Dr. M. was unable to collect his account and was compelled to sue for it, I reckoned that

when he had gotten in my debt several dollars I, too, would have to sue, only to find all his property in his wife's name or else exempt under the law from execution.

Dear Sir or Madam, do you blame me for not going?

If you do, then perhaps you, too, are one of the ones who manage to make a big splash in the social pool at the expense of the man to whom you turn in your hour of need—the doctor.

These few remarks are not offered for the benefit of the professional "dead beat," but for those who *intend* to pay, but keep putting it off with, "Oh, well, the doctor makes lots of money, he can wait."

It is very true that the average doctor, if he has any practice, makes a considerable sum, provided all his patients are not like the above. But my kind reader, did you ever pause to consider the calls which are made upon the doctor's pocketbook?

Did you ever reflect that where you spend one dollar, the physician spends five.

Do you know that while you were selling ribbon or sugar, or mining stocks, the doctor was spending four hard years of his life fitting himself to look after your ailing body and was not amassing one penny.

Do you know that the average doctor, after he leaves college with his diploma tucked under his arm, spends from three to five years in which he hardly makes enough to keep up appearances?

Do you know that the medical profession is changing so fast these days that the new medical book of today is obsolete tomorrow?

Do you realize that his instruments and appliances cost far in excess of the same things in other walks of life?

If you do not know these things it is well that you should be enlightened. Personally I think that you should be enlightened with a hickory pick-handle or some other equally effective weapon.

Physicians are proverbially poor collectors. People like you owe them from year's end to year's end and never think to pay. Sometime, when the Dark Angel is hovering near, you may remember and hand out a five or ten, just about as grudgingly as you give a quarter to a tramp.

Do you think that pleases your medical adviser? If you do, allow me to disabuse your mind.

The average physician, while he may be a poor business man, is possessed of a fair degree of gray matter and can see as far into a mill-stone as the next man. Do not imagine when you rush in with, "Here Doc, is a little on my account. I am sorry it is not more. Won't you please run up to the house, the old woman is not feeling well today?"

"Doc" (perdition strike the man that calls his physician Doc) obediently accepts the charity and obligingly "goes up to the house".

Now, I may be a hard-hearted wretch, devoid of every charitable instinct, but I'm hanged if under those conditions, I "go up to the house."

Out here in the West where there is such a profusion of fine mountain scenery and such a plethora of good air there are lots of people who imagine that the physician can live on those elements alone.

I hasten to inform you that such is far from the case. The hardworking physician needs a certain quantity of beefsteak and pork and beans at regular intervals, to sustain life so that he can minister to your needs.

Try to see if you cannot get around at least once every month and contribute toward that end. I assure you that it would make the physician much more cheerful when you come in and ask him to "run up to the house." He would go about his work with a great deal better grace. He would give all his skill and learning to his task rather than subconsciously withholding a part of it, thinking all the time about the unpaid bill due him.

Try it once, just for luck, and see how much better it makes you feel. The sensation will doubtless be new and new sensations often delight one.

Now, in conclusion, a few words to the doctor himself. I have lived in the world for nearly forty years, am not antique at all, but still old enough to have learned a few very valuable truths. My preceptor enjoyed the largest country practice of any man in his vicinity. He had the firmest friends and the bitterest enemies of any professional man I ever knew.

He was shot dead by an assassin while driving down the street in his carriage.

He had no time to anticipate death so as to get his business affairs in shape. His

administrators found the sum of thirty dollars on the books, which they collected. That was all.

That was business. How did he do it? Simply by applying business principles to his business. No man owed him longer than thirty days without securing the debt in some way. The professional "dead beat" got scant courtesy in that office.

If Mr. Jones came in for services the doctor first ascertained if Mr. Jones had been in the habit of employing another physician. If so, did Mr. Jones owe that other physician? If Mr. Jones did, then he must return and settle up with his former physician before the doctor would attend him.

I do not wish my readers to gather the impression that the good doctor was uncharitable or lacking in sympathy, for he did more than his share of charity work. I have often thought the we, as a body, might apply these same rules to our business. If we were not so eager to best our brother practitioner we could do so. If we could be brought to realize that only by upholding the dignity of the profession as a whole can we ourselves succeed, there would be less people able to obtain professional services without the outlay of a cent, as many of them do, owing to our eagerness to obtain prestige.—Taken from *The Backbone Monthly*, March, 1910.

ORIGINAL ARTICLES

THE ROUTE OF THE TUBERCLE BACILLUS IN INFECTIONS CAUSED BY THAT ORGANISM.

By RANDLE C. ROSENBERGER, M. D.,

Professor of Hygiene and Bacteriology, Jefferson Medical College; Director of the Clinical Laboratory of the Philadelphia Hospital; Lecturer on Hygiene, Woman's Medical College.

In the examination of a large number of bodies dead from various diseases, Naegeli found that all of the cadavers of persons over thirty years of age showed evidence of tuberculous infection; between eighteen and thirty years of age 96 per cent.; between fourteen and eighteen, 50 per cent.; those between five and fourteen, 33 per cent.; while between one and five, 17 per cent. were tuberculous. In children under one year of age, clear evidence of tuberculous infection was not found. Landry and Adami found that of 1,374 autopsies, 626, or 45.5 per cent., showed signs of tuberculosis.

Beitzke reports that of 198 autopsies in children under fifteen years of age 27.3 per cent. showed tuberculosis; of 703 persons over fifteen years of age tuberculous lesions of some kind or healed lesions were present in 409, or 58.2 per cent. Burkhardt places the percentage of tuberculous lesions encountered in autopsies at 90 per cent., and Lubarsch and Neckers place it at about 70 per cent.

Of 287 consecutive autopsies, Brem found tuberculous lesions in 74.2 per cent., a great majority of which were small focal ones and appeared healed or arrested. Only 21, or 7.3 per cent. of the 287 deaths were due to tuberculosis.

Shennan reports that of 1,085 cases coming under review at autopsy 413 died from tuberculosis. The ages varied from three months to thirteen years and approximately 68 per cent. were under five years of age. The lymphatic glands were tuberculous in 92.4 per cent. of one series of 105 case sand in 78.8 per cent. in a second series of 243 cases. In nearly half the cases of tabes mesenterica, there was no ulceration of the intestine and in one-third there was no excavation of the lungs. Death was due to tuberculous meningitis in 44.5 per cent. of the cases. Apparently the dissemination had taken place in the majority from caseous lymphatic glands and more often from the mediastinal than from the abdominal groups.

Franz, experimenting with tuberculin upon Austrian soldiers, found that in one regiment 61 per cent. gave a positive reaction; in another regiment 68 per cent. gave evidence of positive reaction. This indicates, if the tuberculin test is reliable as a diagnostic aid, that tuberculous lesions existed to an alarming extent in individuals who should be among the healthiest.

Siredy and Tinel report the case of a boy sixteen years old who presented symptoms of meningitis. The most minute examination at autopsy failed to show any tubercles on the meninges or in the cerebral cortex. The case corresponded to the type described by Delittle as "diffuse leucocytic infiltration, predominantly perivascular, and with tendency to nodules."

In no preparations could giant cells be seen or even caseous degeneration.

A large number of tubercle bacilli were disseminated wherever there was leucocytic infiltration of the membranes, especially grouped around the blood vessels, forming in certain places little agglomerations without modification in the form or grouping of the neighboring cells.

Higgs reports a case of tuberculous meningitis without tubercles in a boy aged eight years. Tubercle bacilli were present in the cerebrospinal fluid obtained before death and at autopsy. No tuberculous lesions were evident to the naked eye in the meninges, brain, lungs, mesentery, or intestines. In fact the only tuberculous lesion present was an actively caseating bronchial gland. Higgs explains this case by assuming that while general tuberculous infection usually takes the form of a pyemia it may occasionally only be a septicemia, and that the primary tuberculous focus in the first case (pyemia) *discharges into the circulation clumps of bacilli with tissue debris* and that these clumps, becoming impacted in the smallest arterioles, cause the formation of miliary tuberculous granulations around the blocked vessels, but that in the second case (septicemia) *separate bacilli only are discharged into the circulation in considerable numbers and that these isolated bacilli do not get lodged in a small vessel.*

Hedesstrom reports five cases of tuberculous meningitis following traumatism, with a primary tuberculous focus elsewhere. At autopsy the tuberculous meningitis was a surprise in three cases, as attention had been directed solely to the trauma. The injury had probably roused the tubercle bacilli lying latent in some primary focus elsewhere and allowed their entrance into the blood where they settled in the meninges as the point of least resistance owing to the injury from the accident to the head. *All the patients had been previously clinically healthy* and the trauma comparatively trifling. The autopsies revealed the tuberculous nature of the meningitis in each case and the unsuspected primary focus in the lungs or bronchial glands.

Rabinowitch obtained tubercle bacilli from the swollen lymph glands of a child aged fourteen months who died of broncho-pneumonia, and from the calcareous glands of four adults, *none of whom had exhibited any other signs of tuberculous disease.*

The foregoing data are given principally to show the enormous extent of the latent forms of tuberculosis, as well as to delineate the typical lesions and conditions brought about by infection with the tubercle bacillus.

Of Naegeli's figures, as well as the others quoted, it must be borne in mind that *the cases did not all die of tuberculosis*, nor was tuberculosis suspected in a majority of the cases. Thus in Brem's series only 7.3 per cent. (of 287 autopsies) died of tuberculosis. *Here, I think, the suggestion of Fest should be most carefully considered, i. e., the difference between tuberculous infection and tuberculous disease.*

The cases of meningitis cited were undoubtedly instances of tuberculous infection presenting atypical lesions, because they did not show any of the characteristics of the disease: caseation, giant cells, etc. On the other hand masses of polynuclear leukocytes were the predominant lesions present in each case.

These studies also show us very markedly the undoubted presence in the blood at some time of the tubercle bacillus. If tubercle bacilli are taken in by inhalation, or more probably by ingestion, what becomes of them? They certainly escape the action of the gastric juice and also the intestinal secretion. Oberwarth and Rabinowitch, Ravenel and Reichel, Herman, and others have

shown by experimentation that the bacilli can penetrate the intestinal wall without lesion of any kind, and be found in the thoracic duct several hours after ingestion. Anyone who understands the circulation in the villus of the intestine knows that the bacilli must travel by way of the lymph *and* blood and must surely get into the general circulation at some time. From the general circulation some may be excreted by the urine and feces; others undoubtedly take up their abode in the lymph glands or other structures and lie dormant for months or perhaps years, according to Hamburger and others. *Note, if they do take up their residence in the lymph glands does this necessarily mean that the person will develop general tuberculosis or tuberculosis of that particular gland or group of glands? Not by any means.* If some injury takes place which lowers the vitality or resistance of that part, or if through prolonged strain of some kind a general lowered resistance to the body is brought about, infection most surely can or will take place.

In a study of the mesenteric and other glands made several years ago it was found that *40 per cent. of cases having no tuberculous lesions in any part of the body showed tuberculously infective lymphatic glands.* Rabinowitch's studies fully substantiate the above findings.

It is absolutely impossible to determine the stage of incubation in tuberculosis as it may be weeks, months, or even years in developing, and the tubercle bacilli ingested or the organisms that pass from the tuberculous mother to the fetus may lie dormant in the child for an unknown time. Bergeron has found in experiments that the bacilli disappear from the circulation and become fixed in the tissues.

Raw is of the opinion that tubercle bacilli in milk readily pass through the intestinal wall into the nearest lymphatic glands, leaving no visible tract on the intestine.

Casper, in remarking upon primary tuberculosis of the bladder, says that these cases are not well understood "because we do not know the reason why the tubercle bacilli, *which we believe are harbored by a large proportion of mankind,* take up their abode in the bladder and become virulent."

Oberwarth and Rabinowitch, after feeding young guinea-pigs upon bovine tubercle bacilli, found that after twenty-two hours up to twenty-one days the organisms could be demonstrated by culture from the blood, lungs and mesenteric glands.

We must not forget the infection which Landouzy has termed "typho-bacillose," characterized by the presence of tubercle bacilli in the blood, and which closely resembles typhoid fever or some septic state.

Another condition described by Roberts and Bhandarkar as acute tuberculous fever, which they say may be confused with continuous and remittent fevers in Africa, may be Landouzy's typho-bacillose, as these two observers (Roberts and Bhandarkar) demonstrated the tubercle bacillus in the urine in these cases, and necessarily, to get into the urinary secretion, it must have been in the circulation at some time.

Whipple's observations of demonstrating tubercle bacilli in the contents of the thoracic duct are very interesting, as he was able to find the bacillus in two acute cases and in 14 out of 19 subacute cases (73 per cent.) with disseminated tubercles, while in six cases of chronic nature with no dissemination, no tubercle bacilli were demonstrated. He believes and mentions that the swallowed organisms can pass through the intestinal mucosa, causing ulceration in the ma-

jority of cases, to form caseation of mesenteric glands, but can traverse the thoracic duct to the blood stream without injury of its intima.

In incipient tuberculosis I believe that the symptoms, rise of temperature, rapidity of pulse, cough, etc., before the detection of tubercle bacilli in the sputum, are due to the dissemination of the bacilli, which have been lying latent, through the body by means of the blood stream, and thus give rise to the symptoms referred to. It is claimed by almost everyone that lessened resistance of a part or organ of the body is responsible for the localization of tubercle bacilli, and I fully believe that this lessened resistance brings about the sojourn of the bacilli in the circulation, that have in the majority of cases, remained latent in the lymphatic glands or some tissue of the body, perhaps for years.

Piffard remarks that as a matter of fact most if not all of us have harbored some of these pernicious little acid-fasts (tubercle bacilli). He then asks, why do not all or most of us give clinical evidence of the infection? "Because nature curtails the activity of the invaders by the polynuclears englobulating and possibly digesting a certain number of them, while other protecting agencies, through chemical means perhaps, neutralize the virulence or impair or destroy the reproductive powers of the organisms; and in addition some of them may be coralled bodily, as it were, and placed behind the bars with prison walls around them and given an indeterminate sentence. Thus it is that with most of us the resistive powers of the body overcome the aggressive force of the parasites. Circumstances, however, may arise while the imprisoned microbes are still living and virulent that permit them to escape from their bonds and bring about a clinical picture too well known to need description in this place."

Kelynack, in the opening chapter of his book (*Tuberculosis in Infancy and childhood*, 1908), claims that a not inconsiderable proportion of the heavy mortality and extensive crippling occurring in adult life from tuberculous disease *is the outcome of infection dating back to infancy and childhood*.

The fact that the tubercle bacillus passes directly from the mother's blood to the fetus through the placental circulation, without disease of the fetus developing, has been proved time and again by many observers. It is the recognition of this fact that impresses it upon me very strongly that the organisms are not destroyed but simply take up lodgement in some organ or tissue of the body and reappear in the blood stream at irregular intervals. If this were not so, how would tubercle bacilli be so easily demonstrated in the cerebrospinal fluid, joint fluid, or in smears from cases of tuberculosis of the glands; or in the urine and feces, without disease of the genito-urinary system or intestinal canal?

It is a well known fact that in the mouth of almost every normal(?) or apparently healthy individual, there reside the pneumococcus, streptococcus pyogenes and other varieties of streptococci; in the mouths and throats of some the diphtheria and influenza bacilli are harbored; in the nose the meningococcus is sometimes present; in the intestinal canal and bile the bacillus typhosus lodges, as well as the bacillus coli communis and numerous other bacteria. It is also known that residents of the tropics and other parts of the world harbor in their intestinal canal for years animal parasites, as ameba, which may at any time produce dysentery or amebic abscess of the liver; and in the blood of some of the inhabitants of the Isthmus of Panama and other tropical countries the malarial parasite is harbored.

Now, if the human body can take care of these bacteria and animal para-

sites, though not causing infection in the individuals themselves, does it not seem reasonable to suppose that the tubercle bacillus may also be harbored by a great many apparently healthy individuals? And does not the occurrence of tuberculous joint disease or bone disease, irrespective of the joint, arising from traumatism seem to indicate that this may be the case? Or in pulmonary tuberculosis, how many cases do we see in which the individual says that he has had a cold or cough for a long time and then gradually, or sometimes rapidly, develops typical symptoms of tuberculosis? A traumatism undoubtedly causes lessened resistance in a part; extreme mental and physical fatigue also tend to lessen the bodily or general resistance, as well as exposure to damp or cold.

As Fest remarks: if we deny the presence of the tubercle bacillus in the blood (because some observers have failed to demonstrate it) it is equivalent to denying the hematogenous origin of the disease.

It must also be borne in mind that according to Meisen and Kretz, Fest, Wright, Liebermeister, and many others, the tuberculosis we meet most frequently in our daily routine is the end result of a general infection which has localized in the tissues of the lung.

RHEUMATISM.

By JOHN E. LAYSLEY.

RATON, N. M.

There is no disease, perhaps, that might be so well calculated to drive the average practitioner to therapeutic nihilism as that of rheumatism. The reason for this is obvious. Since the days of Sydenham it has been recognized and treated as a distinct pathological condition, yet we are still in the dark as to its etiology and, with the single exception of the introduction of the salicylic acid treatment by Russ and Stricker of Germany in the early seventies, almost as little progress has been made in the therapeutics of this disease.

Rheumatism was confounded with gout by the ancient Greek practitioners and the term itself was originally used to indicate conditions associated with mucous discharges—conditions which were later classified as catarrhal. It was not until 1633 that Sydenham first differentiated rheumatism from gout and described the two conditions intelligently.

Acute rheumatism is defined by Tyson as "an acute infectious, but non-contagious fever, characterized by arthritis, usually multiple." There is little essential variation from this definition among the various authorities. There is a difference, however, in the classification of the various forms of rheumatism, for while most authorities classify the acute form as an infectious disease, Anders puts the chronic form in the class of "probable infectious diseases," whereas Tyson and Osler include it in the list of constitutional diseases. I rather prefer the classification of Anders for I believe that those chronic conditions that are really rheumatism as certainly have an infectious origin as have the acute.

As to the etiology of the disease there is no longer any reasonable doubt that it is of germ origin, though the specific micro-organism has not yet been isolated. The older theories—the most popular of which were the metabolic and the nervous—at present have few adherents. Various bacteria have been

found in rheumatic joints by different investigators. In many cases streptococci or staphylococci have been found. Treboulet and Coyon in a series of cases found a diplococcus that stained by the Gram method. The frequent association of tonsillitis with rheumatism is a point in favor of the streptococcic origin of the disease.

There is little to be said of the pathology of rheumatism. In mild cases there may be no microscopic changes from the normal. In severe cases the synovial membranes of the affected joints are usually hyperemic and swollen and the exudate is mainly serous. In rare instances a purulent exudate may be found.

Among the predisposing causes of rheumatism may be mentioned age, climate, season and exposure to cold and dampness. It is said that eighty per cent of all cases occur between the twentieth and fortieth years. It is most prevalent in the temperate zones, being comparatively rare in both the cold and tropical zones. The greatest number of cases is seen during the months of February, March and April, though it may occur at any season. A most marked predisposing factor is exposure to cold and dampness, hence those whose occupations necessitate such exposure are frequently attacked. I have found it very prevalent among coal miners and in a majority of cases there is history of the patient's having worked in a wet portion of the mine.

Rheumatism presents a rather wide variation in its symptoms. There is frequently a preceding tonsillitis. The temperature rises in moderate cases to 102° or 103° , the pulse to 100 or 110, and there is swelling, pain and tenderness in one or more joints. This pain is very acute and is increased by any movement of the affected joint. Two or more joints may be affected simultaneously, but the various joints are usually attacked in rotation. Thus the wrist or elbow may be affected one day, the knee and ankle the next. Swelling is more marked in the knee than in any other joint. The muscles adjacent to the affected joints are often swollen, painful and tender to the touch. The sweat glands are active and the skin is frequently bathed in copious perspiration. The temperature throughout is variable and subsides by lysis. There may be brief afebrile periods followed by exacerbations of temperature. In rare instances there is a hyperpyrexia and the temperature may rise to 107° or 108° . These cases are usually fatal from the hyperpyrexia itself. The duration of an acute attack of rheumatism may be anywhere from a few days to six or eight weeks. One attack seems to predispose to another and in some instances the chronic form of the disease follows the acute.

The most dreaded feature of rheumatism is its tendency to cardiac complications. There may be endocarditis, pericarditis or myocarditis. Of these by far the most frequent is endocarditis, which occurs in about twenty-five per cent of all cases and frequently gives rise to grave valvular lesions.

The diagnosis of acute rheumatism seldom presents many difficulties. It must sometimes be differentiated from acute osteomyelitis, from pyemia and from gonorrheal arthritis. Probably the first differentiation is the most difficult and the most important. In osteomyelitis the epiphysis and shaft of the bone are implicated and not the joint, there is usually only one point of attack and the general symptoms are graver from the start. In pyemia the multiple rigors, accompanied by sharp elevation of temperature and the development of metastatic abscesses in the skin, should aid us in the diagnosis. In gonorrheal arthritis there is—or should be—a history of recent infection, the condition

usually persists in a single joint and the local symptoms are more pronounced than the general.

In the treatment of rheumatism we have as yet no specific. No less eminent authorities than Garrod and the elder Flint have declared that drugs are useless. However, this was before the use of salicylic acid. The latter drug, usually given in the form of sodium salicylate, has a marked influence on the course of the disease, alleviating the pain, lowering the temperature and promoting free diaphoresis. It should be given in solution in doses of fifteen to twenty grains every two or three hours until the symptoms of salicinism are produced, when the dose may be decreased to ten grains every four hours. Free elimination through the bowels and kidneys should be maintained by the use of Epsom or Rochelle salt and potassium acetate. The latter drug is useful also in maintaining an alkaline urine. An ounce of the saline may be given every morning for three or four days and then every second or third day as indicated. The potassium acetate is given in doses of fifteen grains every two or three hours, alternately, or in combination with the sodium salicylate. Hot tub baths are useful in flushing the capillaries and thus aiding elimination through the skin. With this general treatment may be combined local measures of less importance. Continuous heat is applied to the affected joints by means of flannel cloths wrung out of hot water or by the use of hot water bottles. Or oil of wintergreen may be applied pure and covered with gutta serena, over which is placed a flannel bandage. The hot air apparatus has been used with some success but, of course, is not practicable in the majority of cases. Of late years Bier's hyperemia has been advocated and good results are claimed for it. Personally I have had no experience with it. In those instances where gastric disturbance is caused by sodium salicylate the oil of wintergreen may be substituted. It should be given in milk in doses of twenty drops every two or three hours. Salicin in doses of fifteen or twenty grains is always well tolerated. I have obtained good results with aspirin in cases where sodium salicylate has failed. This drug, which chemically is acetylsalicylic acid, passes unchanged into the intestine and is absorbed there instead of being absorbed in the stomach, as the sodium salt is. It, therefore, produces no gastric irritation. I believe calomel is useful only for its cathartic effect. In obstinate cases potassium iodide in combination with the salicylates sometimes produces good results. If there is any suspicion of syphilis, it should be given. Bees have lately been employed in the treatment of rheumatism and at present are being used in the Cook County hospital at Chicago. They are caused to sting the skin over the affected joints, the theory being that the bee introduces into the tissue a toxine which antagonizes the toxine of rheumatism. I have had no personal experience with this treatment. It can readily be understood that the counterirritation produced might be beneficial, whether or not the toxine theory is correct.

The heart should be examined daily for evidence of endocarditis, pericarditis or myocarditis. It is stated by some authors that the free administration of alkalis—especially of sodium or potassium bicarbonate—tends to prevent cardiac complications. Should hyperpyrexia develop, it must be treated with the cold pack.

The diet during the acute stage should be liquid—preferably milk or albumin water. In convalescence it may be gradually increased until a full diet is reached. In this stage the anemia and general weakness call for such tonics as iron, arsenic and cod liver oil. Digitalis and nuxvomica are also useful.

In the chronic form of rheumatism—whether articular or muscular—the only constant symptom is pain. In the articular cases there may be only one joint involved and there may or may not be swelling. Probably half the pains classed as rheumatic are due to some other origin. Drugs are said to exert but little influence in chronic rheumatism, but I don't believe this is true of those joint cases with swelling. I have had better results from aspirin in the chronic cases than from any other drug. Where pain is the only symptom we must eliminate syphilis, gonorrheal infection and the various neuralgias before making a diagnosis of rheumatism. And after we have sorrowfully arrived at this diagnosis we have done about all we can do for the patient. Tonics—such as iron, quinine and strychnine—may be of benefit. Counter irritation and blistering are more efficacious than any other local measures. Hygienic living is to be advised and often a change of climate produces marked improvement or even a cure.

We are prone to overlook the fact that, unsatisfactory as is our treatment of rheumatism, our knowledge of its etiology is even more so. Therapeutics, the most persistently decried branch of medical science, has ever been in advance of our knowledge of the etiology of disease. We knew how to treat malaria and syphilis long before we knew what caused them and in each case the discovery of the specific micro-organism made no change in our mode of treatment except that in syphilis we can now begin treatment earlier where the diagnosis is made with the microscope than we can where it is made clinically. In all probability before another decade has passed the specific etiological factor in rheumatism will have been discovered. But will this make any difference in our mode of treating it? Let us remember that in only one disease—diphtheria—has the isolation of its specific germ resulted in the discovery of its specific cure. Medical therapeutics can never be an exact science. In rheumatism, as in most pathological conditions not amenable to surgery, we can only meet symptoms and aid the natural resisting power of the patient. And yet the treatment of rheumatism is only one of many exemplifications of the fact that if the medical practitioner could accomplish nothing but the relief of pain his time and labor would be well spent.

SUPPURATIVE OTITIS MEDIA OR MASTOIDITIS.

By T. E. PRESSLEY, M. D.,

ROSWELL, N. M.

Suppurative inflammation within the cavity of the middle ear may occur in either the acute or the chronic form. The acute type may be either primary or an acute exacerbation of the chronic form. The primary acute type is not so dangerous as the chronic or the acute exacerbation occurring during the progress of the chronic form.

Suppurative otitis media is characterized by a primary acute suppurative inflammation which may subside, leaving a healthy tympanum; or it may continue indefinitely in a chronic form with acute exacerbations. The drum-head is usually perforated, the discharge taking place chiefly through the external Auditory canal, although there may be more or less discharge through the eustachian tube into the naso-pharynx.

The primary acute type and the acute exacerbation of the chronic form are attended by marked febrile symptoms and more or less pain in ear and Mastoid.

Etiology Cause—1st. The specific or infectious fevers in which the peculiar pyogenic organism incident to them gain access to the tympanum through the Eustachian tube.

2nd. Catarrhal states of the naso-pharynx or predisposing causes.

3d. The pressure of enlarged pharyngeal tonsils (adenoids) is often the cause of middle ear suppuration as they close the eustachian orifice prevent drainage from middle ear.

4th. Exposure to inclement weather. Violence, direct blows to the head over the ear may cause it.

5th. Influenza is especially liable to produce it. Diphtheria and scarlet fever are very often followed by suppuration of middle ear, with great destruction of drum-head and intra tympanic tissues.

Pathology—In primary acute otitis media (mark you) there is rarely an extension to the cranial cavity.

This is due to the fact that the mucous membrane and bony walls of middle ear remain intact and obstruct the progress of the infection inward. If the inflammation continues for any length of time, the blood vessels of the mucosa may become thrombosed and cause degenerative changes in it, and thus give rise to an extension of the pathologic process to the meninges and brain. If the thrombi are infected, they may become the source of infective emboli and be carried to the brain, spleen, liver, kidneys, and lungs. Meningitis, pneumonia, etc., may follow as direct result.

It is now a pretty well recognized fact that most cases of meningitis not due to tuberculosis are directly traceable to chronic suppurative otitis media.

It must not be forgotten, however, that suppurative discharge of the accessory sinuses of the nose is also responsible for a certain number of cases.

Granulation tissue spring up at the points of ulceration and bone-necrosis in an attempt to repair the damage done to the tissues.

They cause absorption of the contiguous bone by pressure-necrosis at the

same time. Their presence also obstructs the flow of pus and causes its retention. This leads to septic infection and the pressure-symptoms so commonly observed in Mastoiditis.

If the Fallopian aqueductus (through which the facial nerve passes) is exposed by the necrotic process, the infection may gain entrance to the cranial cavity through the sheath of the facial nerve.

General Prognosis of S. O. M. The primary acute type usually runs a short course. Hence it is not likely to extend into the cranial cavity, but it may become chronic. Facial paralysis sometimes occurs in the chronic form and is a serious sign and demands a radical operation at once.

Recurrent attacks of pain in the mastoid are signs of chronic mastoiditis.

A fetid odor is also a sign of chronic mastoiditis and requires careful attention. It may not be noticed until the middle ear is searched with a probe when it becomes quite pronounced.

Perforations of the drum-head in the various quadrants indicate certain severity within of which I shall not speak in detail, but shall mention the tense and flacid membranes, the former indicating cavities of the Incus and requires removal to affect a cure. Of the latter indicates cavities of both Malleus and Incus and also of the attic walls in which case the danger is more pronounced, but perforation elsewhere signifies a pathological process less severe and in all probability is limited to the middle ear, proper. Such cases rarely give much trouble.

A small amount of discharge is usually regarded lightly by both patient and physician, but such cases should be looked on with suspicion and prognosis guarded.

Symptoms of Suppurative Otitis Media. These vary according to the acuteness or chronicity of the disease and the amount of obstruction to the middle ear drainage. In the acute stage or acute exacerbation of chronic form there may be pain of an excruciating character. It may be located in the ear or mastoid bone according to parts chiefly involved. If the mastoid cells are involved, pressure over the mastoid will give pain. The acute manifestations are attended by fever, while the chronic form is but slightly or not at all thus affected. The chronic form is characterized by little or no pain unless an acute exacerbation occurs. If drainage from the mastoid cells become obstructed, pain, swelling, redness, and tenderness quickly develop, the condition known as "acute mastoiditis" is present. In such conditions the patient will usually tell the physician that there had been profuse discharge from the ear which suddenly stopped when the pain began. Whether the inflammation be of the acute or chronic type, subjective noises, impaired hearing, giddiness and loss of sense of taste and smell are usually present.

The appearance of the drum-head, seen on examination of the acute and chronic stages, in the acute the drum layer of the drum-head is injected at its periphery, over the membrana floccida and along the handle of the malleus. As the exudate forms the drum-head becomes bulged outward. The handle of the malleus is no longer visible. If the attic be chiefly involved, the bulging will be in the membrane flaccida, febrile symptoms are present. The acute stage may terminate in resolution (which is rare) or the drum-head become perforated and assume a chronic form, with a continuous discharge varying in

appearance from a thin watery or pinkish cerumen to a thick white or yellow cheesy pus, the external meatus frequently becomes excoriated or frequently becomes enlarged and tender.

This chronic form may become less severe, discharge lessens, and possibly subside entirely to be followed by an acute exacerbation and a repetition of the acute attack in a few weeks or a few months.

Treatment of Suppurative Otitis. Pain and congestion may be relieved by antiphylogistic measures. Local heat and cold and the abstraction of blood are the most reliable remedies for this purpose. Artificial leeching in front of the tragus or over the mastoid process should be done when there are pronounced inflammatory signs, which will not yield to applications of heat or cold. In case the pain does not abate, the drum-head should be freely lanced whether it is bulging or not. And if it is bulging and pain be absent it should be freely lanced also. Medical applications to the meatus of warm solution of 2 grs. morphia to the ounce 5 or 6 per cent carbolic acid in glycerine, or cocaine 4 per cent solution.

When there is a slight perforation it should be opened wide to allow free drainage. When it becomes more chronic or pus flowing freely, cleanse the ear with hydrogen and with boric acid solution, polizing the eustachian at same time that the ear and tubes may all be thoroughly cleansed. Alcohol is induced 50.90 percent sol. Dry gauze treatment is effective in some cases, also the insufflation of boric acid pow.

Should the mastoid symptoms become prominent and persistent it may become necessary to "operate" in order to drain the middle ear, attic, antrum, and mastoid cells.

To go into the details of a mastoid operation will necessarily make this paper too lengthy.

Mastoid Operation. The various steps of the operation are (1) preparation of the patient; (2) the post-auricular incision; (3) the anatomical landmarks; (4) the exposure of the antrum; (5) exploration through the exposed antrum; (6) the removal of the bony wall between the antrum and middle ear; (7) the removal of the morbid material from middle ear and mastoid cells; (8) how to avoid injury to the facial nerve, horizontal semicircular canal fenestra ovals; (9) closure of the wound; (10) post operation treatment; (11) results of the operation.

Preparation of the Patient. The operation should be done in a hospital, if possible, as it is a prolonged one and may require every advantage for its successful performance.

A superficial operation will suffice, perhaps, to avert immediate danger, but will not cure the patient of the chronic pyogenic disease, which may at any subsequent time place his life in jeopardy. Do a thorough operation once for all, and cure both the acute manifestation and the existing chronic form.

Shave the head for two or three inches around the auricle twenty-four to forty-eight hours prior to the operation. Scrub the skin with green soap and

boiled water, after which it should be washed with alcohol. The scalp should be cleansed also.

Pack the meatus and cover the whole side of the head with moist carbolized gauze not to be removed until ready for operation. Prepare your patient for general anesthesia as you would for any other operation. When well under anesthesia remove gauze and scrub the head as before and pin sterilized towels around the patient's head and place it on a cushion to overcome the shock from the blows of the mallet.

The wound should be well lighted during the operation. This may be done with a lamp or hand mirror.

The post-auricular incision should begin at the tip of the mastoid process, and follow within one-quarter inch from the line of union between the auricle and the skin over the mastoid, to a point immediately over the superior auricular attachment. The tip of the mastoid should be located and the scalpel inserted through the skin and periosteum, cutting both as it follows the auricular attachment. The periosteum should be elevated or loosed with the periosteal elevator and the bleeding points seized with artery-forceps.

The periosteum and the skin of the post superior wall of the meatus should also be separated from the bone and cartilage. The ear pulled forward and the posterior edge of the wound pulled backward and held with retractors in the hands of an assistant.

The Anatomical Landmarks. Having exposed the bone meatus certain landmarks should be sought as guides to the autumn by such a souti as will avoid injury to the lateral sinus, the middle fossa of the cranium and the facial nerve.

By operating within the limits of the suprameatal triangle and following the direction of the external auditory meatus to a depth of about three-eighths of an inch less than the depth of the bony meatus and middle ear combined, the sinus, cranial fossa and facial nerve will not be injured except rarely.

An opening extending from the centre of the triangle inward in a direction parallel with the post-superior wall of the external meatus will almost invariably expose the cavity of the autrum, unless it has been obliterated by sclerosis or other process.

Herein is the reason for measuring the depth of the meatus and tympanum before beginning the removal of the bony structure. By knowing the depth of the parts named and subtracting three-eighths of an inch (the outer wall of the autral cavity is about three-eighths of an inch nearer the surface than the inner wall of the middle-ear cavity) the operator knows at what depth he should enter the antrum, and he knows that if he does not enter the antrum at that depth it is obliterated (rare).

Having located the autrum its entire external wall should be removed so as to expose it to inspection and operation. In many acute mastoid cases these steps will be greatly modified by the presence of carious and necrotic bone. Where the bone is softened the operator should follow the track of the carious bone to any part or in any direction, removing it all. But the location of the authrum should not be lost sight of.

Chisels and gouges varying in width from 3-16 to 3-8 of an inch, the den-

tal engine and burr may be used to open the antrum. The chisel is the best instrument in the hands of the occasional operator.

Exploration Through the Exposed Antrum. After having removed the outer wall of the antrum the cavity should be thoroughly explored by inspection and with a small probe for caries and necrosis, which if found should be thoroughly removed. The mastoid cells drain into the antrum and they should be inspected and opened, if necessary.

The middle-ear cavity should also be inspected for disease of the ossicles and tympanic walls which should be attended to.

Closing the Wound. Having removed all morbid material from the middle ear, antrum, and mastoid cells and having established conditions favorable for the free drainage of the same the external wound should be partially closed, leaving gauze packed in the wound sufficiently to keep up drainage. Let the gauze remain for 6 or 8 days, if no signs of local inflammation show itself. Will say in a general way after all morbid material has been removed there is not much danger of a return of the trouble.

Read at the Roswell meeting, 1909.

BOOKS REVIEWED

Diseases of the Genito-Urinary Organs, by Edward L. Keyes, Jr., M. D., Ph. D., Clinical Professor of Genito-Urinary Surgery, New York Polyclinic Medical School; Surgeon to St. Vincent's Hospital; Lecturer on Surgery, Cornell University Medical School, etc.: 975 pages, with four colored plates and one hundred and ninety-five other illustrations. D. Appleton and Company, New York and London. 1910. Cloth, \$6 net.

This volume is intended primarily for student and general practitioner. Much has been written upon diseases of the G.-U. System, but this volume appeals to your reviewer as the most comprehensive work upon the subject covering as it does diseases of both male and female and considered from the medical as well as the surgical standpoint.

Every chapter is thoroughly interesting, profusely illustrated and the subject considered so completely covered that nothing is left for the imagination to grope with.

The chapters upon CYSTOSCOPY and URETERAL CATHETERISM, with their illustrations, are alone well worth the price of the volume.

Handbook of Therapy. Cloth. Price \$1.50. Pp. 421. Chicago: American Medical Association, 1910. The Therapeutic Department in *The Journal of the American Medical Association* has been commented on so often and so favorably that the Association decided to reprint, in book form, the articles which seemed to be of most practical value to the general practitioner. Conditions governing therapeutic requirements are stated as clearly and concisely as possible. Special care has been taken to avoid unusual drugs, and with rare exceptions the formulas given are combinations which can be easily compounded by any pharmacist.

Besides the articles on therapy, the book contains a list of the articles accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies, as well as tables and compilations of miscellaneous data.

The book is of convenient size for the pocket or the satchel.

IMPORTANT NOTICE!

Those of our readers who are interested in the various forms of Physiologic Therapeutics (including Hydrotherapy, Electrotherapy, Massage, Hypermia, etc.) will be glad to know that it is proposed to shortly inaugurate a

new journal devoted solely to the delineation of the progress made in these lines of therapeutic endeavor.

THE AMERICAN JOURNAL OF PHYSIOLOGIC THERAPEUTICS will be published bi-monthly and the subscription price will be \$1.00 a year. The names and addresses of all interested physicians should be sent in and those desirous of subscribing at once may enclose their remittance when writing. It is to be hoped that a widespread interest may be aroused in this matter. Write now while this is fresh in your mind, to The American Journal of Physiologic Therapeutics, 72 Madison St., Chicago.

W. B. Saunders Company, the medical publishers of Philadelphia and London, have just issued a new edition—the thirteenth—of their handsome Illustrated Catalogue. It contains some twenty new books and new editions, and besides numerous black-and-white illustrations, there are two color cuts of special value. We strongly advise every physician to obtain a copy—sent for the asking. It will prove a ready guide to good medical books—books that we all need in our daily work.

NEWS

ROSWELL.

A meeting of a District Society, to be known as the Southeastern New Mexico Medical Association, has been called for April 20th.

J. Wm. Williamson has been appointed "Physician" to The New Mexico Military Institute for the next year; a position held by C. M. Mayes for the past several years.

Now for Roswell physicians to be "bored" by "bums" wanting prescriptions for whiskey, since the city has gone "dry". Unless the present physicians of Roswell are very much overrated the "bum" will get a very "spirited" denial instead of a prescription for "spirits".

George T. Veal, a retired though regular, reputable and ethical physician, has been elected Mayor of Roswell and the regular profession may expect every courtesy from such as he.

The Chaves County Medical Society is now, since ridding itself of all disturbing elements, doing good and scientific work in peace and harmony.

The Southeastern New Mexico Medical Association is to meet in Roswell on April the 20th. A large attendance of doctors up, down and across the valley is expected. A splendid program has been arranged. Regular physicians from a distance are welcomed to the assemblage.

The Chaves County Medical Society meets on the second and fourth Thursday nights in each month. Regular physicians visiting the city are invited and welcome to attend any of the meetings.

There is a saying that "Roswell Went Dry", though some say "Roswell Went Dead". Hardly.

On February the 10th, the following resolution was adopted by the Chaves County Medical Society:

Whereas; It has pleased Almighty God in His wisdom, to call hence the beloved wife of our colleague and fellow worker, Dr. Louis H. Pate of Lake Arthur; Therefore,

Be it Resolved, The Chaves County Medical Society in regular session assembled, extends to Dr. Pate and his motherless children, our sincere sympathy and condolence in this, the said hour of their bereavement; and that this resolution be given a separate page on our minutes and a copy sent to Dr. Pate.

J. Wm. WILLIAMSON,
W. C. BUCHLY,
H. A. INGALLS,
Committee.

SANTA FE.

The new St. Vincent's Sanatorium is nearing completion.

D. Knapp and J. A. Rolls were elected members of the school board.

J. A. Massie has moved into his new home.

N. S. Harroun was the republican nominee for city treasurer.

J. H. Sloan is expected home soon.

RATON.

J. J. Shuler was elected Mayor at the last election.

T. B. Hart accompanied his wife to Indiana on account of ill health.

J. L. Hobbs recently visited Canon City in regard to business interests.

L. L. Cahill, of Springer, and Geo. W. Cleaver, of Raton, were elected to membership in Colfax County Medical Society at their last meeting.

SILVER CITY.

At the annual election of the Grant County Medical Society the following officers were elected: President, F. P. Whitehill; Vice-President, G. K. Angle; Secretary-Treasurer, L. S. Peters; Censors, L. S. Peters and G. K. Angle.

At the last regular meeting O. T. Hyde and H. C. Casseldine were elected to membership.

LAS CRUCES.

On February 14th T. C. Sexton was married here in Las Cruces to Miss Lena Broadus, also of Las Cruces.

B. E. Lane has had a very severe attack of pneumonia, but is now convalescent, and sitting up daily.

S. M. Briscoe has left Las Cruces, and is now practicing at San Antonio, New Mexico.

L. J. Kopf has opened up an office here for the practice of medicine.

J. C. Hodges has opened up an office here during the past few months.

E. C. McCaleb also has entered practice here.

ALBUQUERQUE.

It is rumored that a committee has been appointed to instruct the secretary in the art of writing and teach him how to forward papers.

LAS VEGAS.

H. M. Smith was re-elected to the school board.

Jno. D. Hess was elected a member of the Society.

E. B. Shaw at a meeting read the paper by Moody in the Backbone Monthly, which is copied in this number.

W. R. Tipton moved to have 1,000 reprints made of Moody's paper with permission of the magazine, and use them to the advantage of the profession when dealing with slow debtors.

H. M. Smith went to New York on a trip.

W. P. Mills was confined to his home several weeks.

F. T. B. Fest was ill, but could not be killed.

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REQUEST

The secretaries are requested to collect without further delay the subscription of \$1.00 for Volume V; members not belonging to local societies will please remit directly. We must comply with the postal laws and have our books ready for the inspector.

THE EDITOR.

EDITORIAL

DOES CLIMATE CURE CONSUMPTION?

An article with this title from the pen of Hoyt E. Dearholt in the Laymen's Medical Journal caused our editorial protest in the February issue of the New Mexico Medical Journal. We found the statement, that *climate has no influence upon consumption to be unscientific*. Our justified assertion started the ire of the author of the said article. Our protest and the refutation by Dearholt was published in the May number of the Laymen's Medical Journal. The Editor seems to be just. She gives both sides of the question, but we feel very keenly that the author could have expressed his views—how wrong they may be—without becoming personal.

The writer of the editorial has the "*temerity*",—which the author doubted—to answer the question, "does climate cure consumption?" *most affirmatively* and depends upon scientific reasons, borne out by daily experience and observation.

The late book of Arnold C. Klebs is considered the most up to date work on tuberculosis in the English language. The best men worked at it and Klebs held back the edition until after the last International Congress to have an appendix to each section with the expression of the consensus of opinion expressed at the last congress. On page 720 we read: "*In the true climatic sense the high altitude receives great impetus from this Congress, as accomplishing the greatest good for the largest number. The high altitude treatment is most successful in early cases and there with consolidation. It stimulates the whole system, lessens the clinical symptoms, and brings an increase in weight. Climatic treatment of itself, without hygiene, was known to be the cause of recovery, especially in the instance of patients living in the high altitude of the Andes and Alps.*"

This quotation answers the question affectively. There is no need of quoting Bonney, Sully, Turban, Bunge and the multitude of other.

We refer again to the work done by Fuchs-Wolfering: *the precipitin test*

of a tubercular after being transferred to an Alpine climate shows a marked increase of the precipitins over tests made on the same individual directly before leaving the low lands. This constitutes certainly a scientific basis for high altitude treatment.

Why has the U.S. Government established the three Tuberculosis Sanatoria in this region? Would this be done; would such institutions, the maintenance of which is certainly expensive, be kept up unless climate does cure tuberculosis?

One of the best authors on tuberculosis is P. M. Carrington. It would be well to become acquainted with his article according to which New Mexico is "*Nature's Sanatorium for Consumption.*"

Does it count for nothing that so many consumptives begin at once to improve in the high altitude and that the disease, once arrested in 'his altitude, becomes active again when the afflicted, before cured, goes to the low lands?

If the author would take pains to investigate a little he would know why the "*hunger*" is not wanted in the West. It seems that tuberculosis attacks with preference people who have nothing else. To send people out without proper support means hardship for them and others. The human heart cannot see suffering without helping or desiring to help; but when this heart is touched systematically by way of the pocketbook it hardens. It is no pleasant sight to have our streets crowded with the coughing and the spitting invalid. While a large per cent of the population in this region is formed by those who came out for their own health or the health of some member of their family the careless, indigent consumptive is not wanted; he is a constant menace to a fellow citizen and he is his own enemy.

Altitude, as a rule, means sunshine, freedom from fog and moisture, change in barometrical pressure and *cool nights*. The coolness is an important factor when it comes to reducing fever. Some claim that our winters, while far milder than the winters in the North, are too severe; yet the winter time gives us the best results.

We are safe in saying, because we have a scientific foundation and because we have the daily experience, that Alpine climate is curative for the proper cases of tuberculosis.

Climate cures consumption if used in time and under proper conditions. This statement does not exclude the well established fact that *tuberculosis, to a far less extent however, can be cured at home.* We repeat: *Everyone afflicted with consumption has a right to know that climate does cure tuberculosis and for the proper case this cure is more certain.*

At the same time climate cannot perform wonders. The advanced case certainly will succumb, but far slower, and for the well-to-do it may be of interest to prolong life. It is surely a sad mistake and ever against humanity to send to our country with the high cost of living, the consumptive as a last "resort" if they do not have the means to partake the climate with care and wisdom.

—F.

SURGICAL SOCIOLOGY.

Such⁴ is the title of the editorial by Brickner in the May number of the American Journal of Surgery. This is an advance in the right line. In the specific sense surgical sociology has to concern itself with the prevention of surgical diseases and accidents. Here we reach the wild and savage way of

celebrating the Fourth of July. Surgical sociology will have to advocate sane celebration without the noises and losses of eyes and members and even life. But the aim goes further it reaches all industrial accidents.

"To patiently endure preventable accident and diseases is to submit quietly to an unmerited lash. The surgeon is a surgeon, to be true, but he is anxious to teach the community that it is more blessed to give protection than to receive the lome, the halt and the blind.

"This, then, the spirit in which the Department of Surgical Sociology will be launched, in the belief that it will interest and quicken our many readers. and in the hope that, with their encouragement, it will grow in size and in influence to take a place among the forces that are making for social betterment."
—F.

PSEUDO-SCIENCE: ANTI-VIVISECTION MOVEMENT.

We quote from Collier's:

"The reason why a man is selected from all America to be head of a pseudo-scientific society presumably is his knowledge. The Rev. Dr. Tomkins of Philadelphia is president of the American Antivivisection Society. He says human life has not been lengthened. Generally speaking, in Europe it has increased, in three hundred and fifty years, from about twenty to about forty years; in England, in less than half a century, it has increased about five years; in Prussia, in the last quarter of a century, over six years; in Massachusetts there has been five years gain in forty years. The reverend doctor says, "the thing which has made living more endurable through the advance of these centuries has been the development of character regardless of the ills attending the body." We submit to the clergyman that a regard for the truth helps to develop character, and are of the opinion that a text for an excellent sermon may be found in the thirty second verse of the eighth chapter of the Gospel according to St. John".

It is a displeasing sign of these days that mental humbugery and mental perversion, like Christian Science, Mental Healing and Antivivisection, can exist. It is very pleasing that a prominent weekly, like Collier's, takes such a stand and with a few words brand a man, character and movement, who is the head officer of a pernicious society, as belonging to the Ananias tribe.

It is a sad sign, it jars our mind and feeling, that any clergyman should forget the dignity of his *cloth* and dabble in something about which he knows nothing. To pretend is a fraud. A preacher's vocation deals with matters abstract and unreal. It may be that for this reason the minds of some of the less gifted become fastigated by the excogitation required for the study of an exact science and becomes too much for their ability. Yet they seem to like to dabble in things foreign to their education. It seems to be a weakness of some of the *Protestant Cloth* to go astray into dark regions—*dark to them*. I suggest to those members of the *cloth*, who have so much time to spare, to come down to New Mexico and help Brother Lukens, because we, in the far West with our primitive minds, believe the saving of homeless children more important than the saving of mangy mongrels. If the *cloth* must expand, such expansion is more in harmony with their calling.

These errors of some of the *cloth* have given a serious blow to science in England. These falsificating, demented pseudo humanitarians have succeeded

in establishing laws which drive the insular student to study applied physiology on the continent.

What kind of a patriot is that notorious *Rev. Dr. Tomkins*? American science is yet in a primæval condition. Does the *learned gentleman* (?) desire to frost it in the bud? If the reverend gentleman would look over the pews of pious listeners he would see demonstrations of the slaughter of the innocent. Why does he, who preaches a higher life, ignore the mercenary slaughter of nature's pets with the sole purpose to decorate the heads of the pious women, who applaud the unlearned gentleman's excursions into the kingdom of pseudo-science? Why does the reverend gentleman not begin at home? Perhaps right with the women of his family and forbid the purchase of animals, killed cruelly and wantonly, just for the gratification of mere vanity.

Go down upon your knees, Bro. Tomkins, and pray for the courage to stay the eradication of beautiful birds! Pray to your Creator that your narrow mind may be enlarged to be able to separate truth from fanciful gossip!

We quote from Warbasse's book (mentioned among the reviews): "The methods employed by these misguided people are illustrated by the case of the woman who entered University College, London, ostentatiously as a student, after witnessing some experiments she discontinued her attendance, and issued a book against animal experimentation in which was displayed an utter failure of understanding of what she had seen. This was not so bad as the fact that the book contained misrepresentation. A Mr. Coleridge, the high priest of the British movement against animal research, made statements concerning the Physiologist Bayliss, relying upon this woman's tales for his facts. An action was brought against the man by Dr. Bayliss who proved that the statements were *false* and secured judgment for £2,000 and costs—in all nearly £5,000. The money was turned over for the promotion of animal experimentation."

If such a suit had been won by that man Tomkins would he have used the money for the betterment of his fellow men like the physician, or would he have bought some slaughtered birds for his women relatives, or taken a trip to the Holy Land, disregarding the need of suffering mankind to increase the fumette of men of his type?

We hope that the man Tomkins and his associates are honest and merely ignorant and therefore, opposed to learning. But at the same time all these allied movements which have for their foundation a diseased mind, like Christian Science, the Emmanuel Movement and Antivivisection, and which are contagious to the weak-minded, have among their apostles persons who follow the movement for what is in it for them; for the coin; for the notoriety; often for the gratification of an insane instinct to oppose. These men are like criminals. It makes no difference whether occupying a fashionable pulpit or being a woman of society, they prostitute themselves by preferring the life of street mongrels to the life of God's Images."

How can a warm-hearted woman prefer that secrets of nature remain hidden if it be necessary to reach to their knowledge by the painless use of dogs of the street, which, as it is, are a menace to health? Can it be possible that those men in the *cloth*, who are apostles of the supremacy of the animal over man, feel a kind of moral relation to the yellow cur, and, therefore, demand his preservation? Did Rev. Tomkins think that the money, which is wasted to give him notoriety and preserve useless canines, could be used far more godlike for the betterment of his *human brother*? —F.

THE RACE QUESTION OVERDONE.

F. E. Daniel proposed an amendment to the by-laws of the Texas State Medical Association, which will exclude from membership not only negroes, but also Chinese and Japanese. The passage of this amendment would be an insult to science. We believe that Daniel, whose attainment we admire, whose mastership of the King's English we covet, had in mind the negro-pest in the South and the Mongol pest in the fruit growing district. We must class differently the educated man bearing the highest academic degrees; else medical organizations would sink to the level of a labor union.

Why should not a Japanese, graduated in Berlin, Paris or Harvard, sit among us and give us the benefit of his knowledge and experience? It is a poor rule which does not apply to all parties in question. Kitasato stands high. Only few in this country have reached his level. If ever he would be willing to honor the profession of Texas with a personal statement of his valuable research work while active in European Universities and later, the brothers in Texas could not accept this; they could not extend hospitality to one of the world's greatest scientists of today and be consequent.

If Daniel carried his opinion for several years he certainly was nothing less but consequent. He could not have presided over an international gathering with educated negroes as active members, nor could he have sat down to a banquet with prominent men from other countries, who have colored blood in their veins. He did so and the writer knew some of these men at their home. He knows what he is talking about. The ebony skin of the gentlemen from Hayti was very dark, his language refined, his knowledge profound, he certainly had benefitted by his stay in Paris. Why was he allowed an active member while Daniel was in the chair?

To be consequent the amendment would have to mean the exclusion of all dark skinned races, with them the Indians. This being the case the son of the President of Mexico, if he were a physician, could not visit logically a meeting of the profession in Texas. Some surgeons in Central America are Indians but would shame many of us in this work.

We do not desire to be understood to grant a social recognition to the negro or the coolie. We despise the man in cloth who stirred up the anti-slavery movement just like the notorious preacher, who fights animal experimentation.

Japan has produced medical men of international repute. China is doing so now. It would be an insult to science, which knows no boundaries of land or race, to go on record and exclude Mongol scientists from the membership of any scientific organization. This cannot be done any more consequently than excluding the Mongol races from diplomatic and military service, be the later only by courtesy. It would be easy for the profession in Texas to keep undesirable members of any race out without insulting a few meritorious members of a yellow skinned race. It is ridiculous to assume that dispensors of stock preparations, the 25c charging medical poor white trash, be given remote recognition over the hard working scientist of Japan, who gave to the world the knowledge of the cause of the Bubonic Plague.

ORIGINAL ARTICLES

PNEUMONIA.

By C. W. FULTON, M. D.,

RATON, NEW MEXICO.

I have confined myself in this paper on pneumonia strictly to therapeutic measures in the treatment of the disease dwelling particularly upon the lobar and lobular types. I believe an unusual degree of attention is imperative on the part of the medical attendant in the management of his cases at this high altitude.

There is no disease which has given rise to so much differences of opinion as regards treatment as has pneumonia nor any disease for which so many specific infallible remedies have been vaunted.

We find a large percent of practitioners, who leave the entire management of the disease to Mother Nature believing that any interference on their part can only result in harm to the patient.

Still another large class treat every case on the same plan and with the same remedies and many of these push their hobbies to an almost dangerous extent.

Again, we find those who wait until the patient shows some definite symptom before they actively intervene, following more or less of an expectant plan of treatment.

There remain many who advocate very active treatment, believing that early measures are most important and that it is bad policy to wait until the patient is so ill that something must be done by which time, the possibility of affording relief or of averting a calamity may be passed.

While it is unquestionably true, that some cases of pneumonia recover without any treatment, whatsoever, and also equally true others die in spite of the undivided efforts of the physician, it remains a fact that there is another class of cases which would not recover without help, and in which appropriate treatment saves life.

Specific treatment comprises many measures which are often beneficial. However, no two cases of pneumonia are the same, even the same case will vary greatly at different times, so that quite different methods may necessarily have to be employed. It is in blindly following the same line of treatment in every case and every stage, that these methods fail.

If we adhere to the expectant plan of treatment in the management of our pneumonia cases, valuable time and opportunities are lost, especially in the early stages, when there are usually no urgent symptoms to treat.

I believe it exceedingly bad practice to do nothing in every case. I believe it hazardous to procrastinate waiting for symptoms which necessitate active interference. As far as specific therapy is concerned, it is hardly to be expected that specific measures can meet the requirements of each and every case.

When death occurs in pneumonia it is attributable to the excessive toxemia of the disease, or heart failure, or to the supervention of some complication.

The management of your case should be conducted along these lines.

Every effort should be directed towards lessening the degree toxemia. If possible limit the extension of the pulmonary lesion, because it causes cardiac failure. Prevent cardiac failure and treat same when it occurs. Undivided attention toward the prevention of complications and appropriate treatment of these developments when same occur.

This is our one thought first, last and always, from the moment we see our patient—the heart. We must sustain the heart and circulation on which the brunt of the attack falls, until all danger is past.

The latest statistics from the Massachusetts General Hospital would indicate, that with a pulse of under 100, croupous pneumonia is seldom fatal. Complications are not likely after the first year and up to the 20th year, because the kidneys are healthy and the toxins are readily thrown off.

It is a common error to suppose that a child has broncho pneumonia. Lobar pneumonia occurs more frequently than supposed. Broncho pneumonia presents quite a different clinical picture from lobar pneumonia. In brief, the chief points of distinction between the two types are:

Lobar pneumonia is almost always primary, broncho pneumonia is frequently secondary.

Lobar pneumonia has a sudden onset with well marked symptoms, whereas broncho pneumonia begins insidiously as a rule.

The temperature in the lobar type tends to be uniformly high and ends by crisis, whereas temperature in broncho pneumonia is prolonged, and irregular and rarely ends abruptly.

Lobar pneumonia affects a localized area of one lung, at any rate the signs are limited to that area, leaving the rest of the lung free.

Broncho pneumonia tends to occur at an earlier age than lobar pneumonia.

Lobar affects male sex more frequently in childhood, as well as in adult life—it may, however, occur at any age. The right lung is more often affected.

Broncho pneumonia occurs particularly in early infancy, affects sexes equally. Lesions are found in both lungs as a rule. However, it is usually secondary to acute infectious processes or superimposed upon some exhausting disease.

The temperature is not so high in broncho pneumonia, the intermittent or remittant types being more or less characteristic. It subsides gradually, crisis seldom occurring.

The mortality in broncho pneumonia has been about 45%, the prognosis when occurring during the first two years of life or when it follows measles, whooping cough or previous bronchitis being especially bad. Also a sudden onset in primary lobular pneumonia is of unfavorable import.

The temperature affords some indication of the virulence of the infection, a hectic temperature with high maxima having a bad prognosis, such cases are due to streptococcal or mixed infection.

Temperature is a response of the metabolism to the invasion of micro organism and toxic disturbances of the nervous regulation of temperature, rather than an over-production of normal forces. Extremes of temperature, high or low, are fatal, whereas a temperature of 104-105, is rather protective than otherwise, it is important to remember that, under the influence of fever *antitoxines* are generated, which neutralize the toxins. However, the fever must be kept within bounds.

Many physicians still attempt to abort the disease by draining the blood

vessels (catharsis) and thus relieving the local congestion or by dilating the peripheral circulation and thus relieving tension or by the use of quinine, which has been very largely used in the early and later stages of pneumonia.

I note that some of the largest institutions in the East, including the Philadelphia and Massachusetts General Hospitals, have discontinued the employment of quinine in this disease for the following reasons:

Quinine in sufficient dosage to inhibit the immigration of white blood corpuscles from congested vessels which, it seems able to do, causes cinchonism, causes hyperemia of middle ear and predisposes to inflammation of same.

Leucocytosis and amoeboid actively are needed to combat infection and quinine if it does not inhibit leucocytosis does inhibit amoeboid activity of polymorpho-nuclear leucocytes. It is cumulative and depressing to nerve centers, also to respiration and circulation, interferes with the ozonizing power of the erythrocytes and interferes with the elimination of waste products.

Personally, I have been inclined to attribute past good results in the treatment of cases of pneumonia to large doses of quinine which I have employed quite generously. However, during the past winter, in several cases of pneumonia with one exception I have not employed it. In the case, it appears that the profession is growing antagonistic to the further use of quinine in pneumonia.

To lessen the toxemia the ice pneumonia, which is responsible directly or indirectly for a majority of the deaths, absolute rest is demanded, the patient should not be raised for food or medicine and the bed pan should be used from the start. It is wise to secure copious sweating by the use of hot baths, hot packs, and by hot mustard foot baths given in bed and kept up by adding more hot water. Results can be increased by copious drinks of water in the meantime. An enema of normal saline assists the kidneys to act—it also has a beneficial effect upon the heart. While routine purgation is to be strongly condemned calomel with sodium in divided doses followed by saline should, I believe, be given for two or three days. Digestion is slow and imperfect at first in pneumonia, therefore toxins have a tendency to accumulate. Aside from securing a good, thorough evacuation and elimination by the use of calomel the secondary portal circulation is also relieved by its use.

Either the oil silk jacket or hot antiphlogistine render excellent service because they help to decongest the capillary blood vessels of the alveoli.

Powerful remedies should not be employed for a diuretic purpose because the kidneys are already congested from fever and toxemia as evidenced by the almost constant albuminuria. I have always found the citrates, the potassium salts or sweet spirits of nitre excellent in the early stages of pneumonia.

Particular care should be devoted to swabbing the mouth and keeping it clean as possible to prevent auto infection from the constant swallowing of bacteria with which the mouth abounds in this disease.

Diaphoresis catharsis and diuresis are only applicable in early stages of the disease when the powers of the patient are as yet unimpaired and when by promptly and effectively promoting the increased excretion of toxins the exhaustion and heart failure which the toxemia causes may possibly be prevented.

I have seen no particular good from the employment of venesection in the early stages of the average case of pneumonia. I employ it and to advantage in the acute sthenic cases when seen early.

If we adopt the expectant plan of treatment the opportunities (which never recur) of lessening the toxemia are lost. The above methods of lessen-

ing toxemia should be regarded as the most important preventive treatment which may frequently ward off subsequent evils.

The importance of limiting the extension of the pulmonary lesion lies in the fact that the wider the area affected the greater the work thrown upon the right heart, particularly the right ventricle from the consequent blocking of the pulmonary capillaries.

We may possibly succeed in limiting the extension of the process provided we get our cases early enough by the application of vigorous measures when only a few rales exist (stage of congestion). For this purpose local leeching, cupping and blistering are indicated. The iodide which is used as a specific by many clinicians is sometimes of service, because it promotes fluidity of the blood, the alkaline carbonates act in this same manner.

Heart failure is due to a number of causes:

To toxemia and fever which poison acts on the neuromuscular mechanism causing vaso-motor paresis. We later have granular degeneration of the heart muscle.

Increased resistance to pulmonary circulation due to consolidation results in the overloading of the right ventricle. In this condition we have excessive venous congestion and high degree of arterial anaemia and this anemia diminishes nutrition of heart muscle through lack of proper blood supply through the coronary arteries.

Accumulation of CO_2 and the slightest asphyxia causes marked diminution in the tonicity of the heart muscle. If tonicity is low heart dilates and a dilated heart works at a disadvantage and leads to over-strain and progressing dilation and finally to death. So in any cardiac overstrain we have instituted a vicious circle.

Abdominal distension is a great factor in cardiac failure. It is quite common, but is less so when the bowels have been kept freely open in the early stages. It is also true that an excessive milk diet increases this tendency to abdominal distension.

Tympanities is always a serious symptom indicating a high degree of toxemia. When it obtains a high colonic tube and enemas of turpentine asafoetida is a potent measure. A hypo of eserine is a measure used with apparently some success although I do not recall of having used it personally in tympanities associated with pneumonia.

Hydrotherapy causes greater absorption of oxygen and elimination of carbon dioxide, it also increases the quantity and quality of glandular juices and destruction of waste material rendering toxins innocuous. The antipyretic effect of cold baths is secondary to the nerve stimulating and sustaining effect; they also enhance the resisting power of the individual.

The elasticity of the heart in childhood obviates danger to a great extent of overfilling of the right heart consequently less tendency to oedema of lungs so prevalent in adults.

Pain is another factor which has to be reckoned with in preventing cardiac weakness. I prefer to apply a flannel soaked in turpentine to the seat of the pain. An ice bag is equally potent, however leeching, cupping or blistering accomplish the same results.

Dyspnoea and pain are an expression of direct intoxication. They always cause nervous irritability and depression.

Restlessness and sleeplessness and delirium are most difficult problems—I believe prevention better than cure.

Avoid moving the patient and providing there is no dyspnoea or cyanosis and the kidneys are active and healthy it is advisable to insure sleep on the part of the patient. A Dover's powder at night will insure this. A hypo of morphine is also admissible if restlessness and delirium deprive the patient of sleep. Often several hours of good sleep will so refresh the patient that the whole complexion of the case is different upon his awakening. Withholding sedatives early and the continued restlessness wears the patient out. I have seen cases in which after the administration of sedatives the patient has sunk into a choked cyanotic condition. On the one hand we fear to deaden respiratory activity, check secretion and cough and on the other hand we fear the effect of sleeplessness and exhaustion. If we feel impending cardiac failure in a case in which the kidneys are healthy, no cyanosis and little or no bronchitis present, administer sedatives, bromides, chloral opium or morphine.

Do not wait until the heart begins to fail before instituting the administration of heart stimulants. I firmly believe that strychnine should be given before the heart shows any signs of failure notwithstanding the fact that many clinicians are of the opinion that strychnine is a whip that should be used to pull a patient out of a critical condition and its constant use day after day deprives a physician of the whip he may need should a crisis arise. In this connection I might state that many text-books on pharmacology state that strychnine has no tonic action on the heart. Cameron has very recently disproved this theory and in accordance with his investigations advances the statement that the drug has the same tonic qualities as digitalis, strophanthus and nitroglycerin.

I believe that strychnine should be given early in cases of pneumonia because—

It keeps the respiratory centre awake.

It is a tonic to the general nervous system as well as to the heart.

It is potent in preventing abdominal distension a condition contributing to heart failure when it obtains.

It is a prolonged and profound cardiac stimulant.

Strychnine has no tendency to poison the patient.

If through our solitious care the tonicity of the heart remains good there is a momentary dilation the heart pumps itself out and becomes smaller and smaller until it is of even smaller volume than before the strain was put upon it.

Much has been written in regards to the use and abuse of digitalis in pneumonia and while the profession is quite agreed that digitalis in cases of broncho pneumonia should be given as soon as the diagnosis has been made, it is debateable whether or not it is good practice to allow it in the initial stages of lobar pneumonia without some special indication exists for its use.

The patient's vitality in the lobular type of pneumonia is usually very low, the attack often arising as it does out of acute infectious processes or superimposed on some exhausting disease. Active measures therefore must be adopted to strengthen the patient and equalize the temperature in the internal organs and skin. Digitalis is given early as it requires from 20 to 30 hours for complete of high temperatures than it does under normal conditions fairly large doses are permissible. To a young adult 3 m of the fluid extract ever three hours should be given for days, increasing the dose as the pulse shows any inclination to increase. To a child of one year 2 to 4 m of the Tr. or $\frac{1}{2}$ m fluid extract every three hours I endorse as a proper measure to be instituted at the beginning of an attack of lobular pneumonia.

Affirming that the mortality in the lobar form is considerably reduced! when the pulse is kept below 100, the Massachusetts General Hospital of late has been employing digitalis as a routine practice in all cases as early as admitted.

When in spite of the treatment outlined in this paper there are signs of dyspnea, faint heart sounds with the exception of an accentuated pulmonia which results from pulmonary congestion tachycardia, compressible dicrotic or irregular pulse active stimulation is required and at this stage and only under these conditions do I administer digitalis in lobar pneumonia. I prefer to give it subcutaneously at first as it not infrequently upsets the stomach and as the patient responds more readily to this form of administration. In all cases when the patient is annoyed by frequent vomiting it must be administered either by hypo or per rectum.

Digitalis acts chiefly on the right heart, not on the blood vessels. The rise in blood pressure is due to more complete systole with a consequent greater flow of blood into the aorta. It also constricts the splanchnic vessels and dilates the peripheral ones. Other members of the digitalis group acting the same as digitalis convallaria, apocynum and catus possess no advantages over digitalis and are less constant in action. Squills is too irritant on the g. i. tract. Digitalin, digitalein digitoxin are more dangerous because they are more cumulative and none induces the cardiac contraction effected by digitalis. Digitoxin has considerably less action on peripheral dilation. Strophanthus has less vasoconstrictor action.

Digitalis lengthens diastole and rests the wearied heart muscle.

It nourishes the heart muscle because the blood supply only reaches it during diastole.

It increases the flow of urine and excrementitious matters.

As a result of more complete systole the output of blood with each ventricular contraction is much increased. This would lead to marked rise in blood pressure were it not associated with lessened engorgement of the right heart and a better emptying of the veins thus lessening peripheral resistance to arterial blood.

When the first sound of the heart lacks tone and the pulmonia is accentuated give 5 m. of the Tr. digitalis every four to eight hours and Tr. belladonnae every two to four hours. Belladonna, because of its fleeting effects, must be given oftener than the digitalis.

Only guide to dosage is the therapeutic result. A very moderate slowing of the pulse is desirable as it means more complete systole and better suction action by prolonged diastole.

Many objections have arisen in regard to digitalis, because of its variable strength—its irritating action on the g. i. tract and its accumulative effects. Physiologically standardized digitalis is the only form in which the drug should be prescribed. The non-cumulative preparations of digitalis on the market are physiologically inert as the isolated active principles of the drug have cumulative action especially digitoxin. It is an undisputed fact that the combined active principles give better results than those obtained from the employment of any single one.

Although adrenalin has been employed as a cardiac stimulant in pneumonia, I fail to appreciate wherein any beneficial results may be realized from its use. Adrenalin acts quite differently than digitalis. It is a powerful vaso-

constrictor and causes increased blood pressure, by its action on the nerve endings in the walls of the blood vessels. This increase in pressure is so marked that the heart is called upon to do an enormously increased amount of work which may lead to acute dilation myocardial degeneration existing as it does frequently in pneumonia.

Much harm has been worked by the too free usage of alcohol. It has often been responsible for delayed resolution also increases toxemia, it develops uremic conditions, causes restlessness and excitement, is conducive to distention of the stomach and throws more work upon the kidneys. However it is the best professional opinion that in moderate amount of red wine is undoubtedly of benefit in children and habitual toppers as it assists to maintain blood pressure and peripheral dilation.

Emphatically the most important measure to keep in mind in the treatment of pneumonia is venesection. As a paliative measure it often saves the patient from impending death. It is not practiced with any where the frequency its indications and benefits demand. A weak radial pulse, with signs of dilation and these are, tumultuous cardiac action, cyanosis, face, lips and tongue blue or purple, distension of the veins of head and neck, veins in the body full to bursting, extreme oftentimes visible pulsation of same. Dyspnoea, feeble rapid apex beat, heart displaced to left, increased cardiac dullness to right, bruining heard over tricuspid area, indicating an engorged right heart and pulmonary obstruction venesection is urgently demanded. Failure to perform same under the above conditions which occur in spite of the treatment heretofore outlined is speedily followed by disaster. The prompt performance of this life saving agency by allowing the escape of not less than 20 ounces of blood from the median cephalic vein is rewarded by an immediate increase in the strength and volume of the pulse and a marked decrease in rate.

In a picture of the character just outlined the small, weak radial pulse is due to emptying of arterial blood into the veins producing extreme overdilation of right auricle and ventricle preventing their emptying. Indeed the right ventricle is often so dilated that its contractions are very feeble and the pulmonary circulation is so interfered with that but a small quantity of blood is delivered to the left heart. It is well to remember that a cardiac patient who does not respond to digitalis when in a livid condition will respond to it after bleeding.

Severe condemnation of the procedure by many of the profession has arisen because of the numerous deaths following it. I believe, however, that all the authoritative clinicians are quite agreed that when death obtains shortly after venesection the issue is necessarily fatal anyway, the cause of death being due to the formation of thrombi formed in the right heart during dilation of same or from the degeneration of the myocardium brought about by the high degree of toxemia.

The blood in pneumonia cases has an increased tendency to coagulate. Cardiac thrombus is due not only to overfilling of the veins and slowing of the circulation, but also to the increased coagulability referred to.

The open air treatment is so generally practiced and with such excellent results that I simply wish to note in passing that aside from being advantageous to the patient, ample illumination and ventilation of the sick room, avoidance of any sweeping or dusting eliminates all danger to family and attendants. The pneumococcus sneezed and coughed out by the patient dies in four hours.

If we are successful in carrying our patient through to the third degree stage which consists in the breaking down or resolutino of the exudations and in their absorption and expulsion from the chest, a stage which the entire diseased area is crowded with secretions which have been formed and in which the local surfaces are depressed and below tone the physician here has an office to perform. His object should be to stimulate these areas so that they may take on a new functional activity and for this purpose remedies must be used which will soften deposits and stimulate the depressed vesicles and bronchial tubes. Chloride of ammonia does excellent service and answers our desires admirably. Should the cough be dry or tickling morphine is useful in its relief.

In reference to diet in cases of croupous pneumonia it is well to avoid everything which will provoke the cough such as drinks too sweet, too salty or too cold, spices, etcetera. I perscribe the usual milk diet. It is diuretic and its digestion fatigues the liver, intestines and kidneys very little. Later when the fever abates a sufficient tonic, diuretic and antiseptic diet should be allowed such as soup, vegetable purees, creams and raw meat.

In broncho pneumonia where stimulation is the watch word a more generous diet consisting of meat and wines diluted as indicated.

The urinary finding in croupous pneumonia, as pointed out by E. Zak., Berlin, may confirm the diagnosis in dubious cases but does not effect the therapeutic indications. These findings are only present after the fifth day of the disease.

One word in closing in regard to the pneumococcic serums. Pane and Romer have experienced special difficulties in their investigations along this line of research. Their report to date is that each individual breeds his own particular strain of pneumococcus, and therefore it becomes necessary to cultivate an individual's own organism for his own cure, a process which they tell us requires fourteen days. It is obvious that this form of treatment will become more useful in lingering cases with complications such as empyema and anthritis both of which conditions are being treated successfully by the employment of these serums. The difficulties just enumerated preclude their use by the profession as a class.

INDICATIONS AND CONTRAINDICATIONS FOR CURETTAGE.

By C. M. YATER, M. D.,

ROSWELL, N. M.

While this subject may seem a little stale it has to deal with conditions which have, no doubt, at times, puzzled the most of us. No doubt many of the younger members of the profession today are having troubles along this line, and even us older ones are not entirely immune at times. It is the purpose of this paper if possible to hold a light for the "young doctor." There are many pelvic and uterine conditions which call for curettage and but few in which the operation is con-traindiecated. This operation, as a means of treatment, has come into general use and is recognized as an, almost, indispensable procedure in many uterine conditions. The first condition I shall consider in which curettage is indicated is endometritis, as this is the one about which the

gynecologist is more often consulted. The uterus is often curetted for endometritis when in reality there is no endometritis at all. Kelly tells us that "True endometritis is as rare as cervicitis and endocervicitis are common." Glandular hypertrophy, hypertrophic endometritis, polypoid endometrium and interstitial endometritis all being collected under the one head of endometritis, are best and most safely treated by a thorough curettage. There are surgeons who have the idea that a septic uterus should not be curetted, and argue, to sustain their position, that it opens up the avenue for the absorption of more septic material. Should the surgeon depend upon curettage *alone* in the septic cases, this argument would be on more tenable grounds, but such is not the practice with the well informed surgeon of today. When the septic uterus is curetted it should also be well cleansed with antiseptic solutions and packed with antiseptic gauze, chief and best among which, in my opinion, is iodoform.

The weight of authority and experience are for a thorough curettage of all infected uteri as a preliminary treatment. In these septic cases whether following treatment, abortion or operation, whether complicating fibroids, cancer, polypi or other neoplasms, the septic uterus must be cleaned out as a step preliminary to other treatment. A septic uterus, it matters not the particular kind of infection; whether it be gonorrhoeic, streptococcic or staphylococcic, or in whatever form the infection may be should invariably be curetted. It matters not if the septic uterus be complicated by disease of the adnexa or peritoneum, whether it be puerperal or not; curettage is the one treatment that is absolutely indispensable. To be sure, I do not mean to eliminate other after treatments, but this should be first as it is, the most important. In acute pelvic inflammation, if the pathogenic germs causing the inflammation reach the pelvis through the uterus it necessarily produces endometritis, salpingitis and peritonitis; or, endometritis, metritis, pelvic lymphangitis and peritonitis. It matter not which route it follows, the question is: does the endometritis disappear when these complications or extensions of the inflammation set up? Our experiences will invariably answer, no. Peritonitis in these cases is but an effort of nature to stop the extension of the disease process. One of the first acts of nature is to close the fimbriated opening in the Fallopian tube with adhesions thus preventing the further extension of the process in that direction. But, such a fortunate occurrence cannot always be expected. The extension may occasionally be through the lymphatics. It is the height of folly to consider these conditions in the light of the complication alone and utterly ignore the source of the trouble, which is the infected uterus, which remains infected and is constantly adding "fuel to the flame." The first thing to do in all such cases is, curette and thoroughly remove the infection that is feeding the trouble, then go after the complications on other lines of treatment, which are not pertinent to my subject. If, for any cause it should be deemed necessary to deal with the complications first, the endometrium should be attended to later if the indication persist. If there is even a suspicion that the infection originated in the uterus, the curette should be used in every case of tubal or peritoneal disease. A good rule to adopt is, treat all cases of endometritis in a manner to prevent complications; and all cases of septic and specific endometritis with complications with regard to these causes, and that will be with the curette.

Cancer gives another indication for the use of the curette. While nothing curative may be expected from its use, even in far advanced cases the foul discharge, nausea, emaciation and cachexia are often very much relieved by removing as much as possible the decayed and diseased tissue by the curette.

When there is the slightest suspicion of cancer the curette should be used for diagnostic purposes. Without dilating on reasons for the indications for curettage in the following conditions, as it would make my paper too long, I will simply state that the operation is indicated in sub-involution with hemorrhage, ante-flexion complicated with dysmenorrhoea, membranous dysmenorrhoea, retroversion and retroflexion with any form of endometritis, prolapsus with enlarged uterus and before celiotomy for the removal of the uterus. Another condition which, apart from the various conditions grouped under the term endometitis, calls for the more frequent use of the curette than most all other conditions combined is uterine hemorrhage. It is indicated in the great majority of cases. Those caused by incomplete abortion, endometrial hypertrophy sub-involution, sub-mucous fibroids, polypi and indeed any uterine hemorrhage either profuse, or scanty which persists beyond a day or so except those hereafter mentioned as contra-indications, should be promptly curetted. I have seen cases of metrorrhagia treated for weeks at a time by tampons, douches, endometrial applications of iodine, etc., until the patient would be almost exsanguinated, and finally the curette do in a few minutes what had been attempted on what was termed conservative lines so long. I make it a rule that any case of uterine hemorrhage that does not yield to conservatism in a day or so, I curette. Incomplete abortions should always be given the curette at once. I will now briefly notice a few conditions that contra-indicate the use of the curette, and they are very few. This operation is not indicated in ante-flexion complicating the menopause in old maids. The fundus uteri rapidly atrophies all out of proportion to the cervix, leaving it large. The cervix finally atrophies, irregularly, leaving the os but pin hole in size, thus retaining the discharges. All they need is dilation of the cervix. Senile endometritis differs very materially from the forms met in earlier life. The womb is small, the endometrium pours out a thin, milky discharge in contrast with the thick, tenacious, muco-purulent discharge seen in cases earlier in life. This discharge is often very irritating, so much so that the vagina has a smooth, reddened surface which is very irritable and the discharge collecting in the vagina becomes very offensive. Vulvitis and intense itching are often present. This condition has been mistaken for carcinoma. The cervix from having been eroded and losing its epithelium in some cases becomes agglutinated, the uterus becoming distended and is converted into a pyo-metra. The patient becomes anemic and suffers with great pain of a burning character in the lower abdomen. Dilatation, not curettage, is the treatment. Abortion at the end of the fourth month contra-indicates curettage. The danger in using the curette is not so much from the risk of perforating the uterine wall as it is in not being able, at this time, to do a thorough work. The cavity is so large and the membranes so tightly attached to the uterus, the curette will slip on the secundines and not take hold, so much so that it is quite a difficult matter and almost impossible to say when the work has been thoroughly done. In these cases I prefer the tampon, the finger and the placental forceps. The last condition which I shall notice which contra-indicates the operation is tubercular endometritis. Curettage will do no good, the uterus is not usually, if ever, the avenue of entrance for the tubercle bacillus, consequently curettage will not lessen the supply and on the contrary might open up the way for a general systemic infection. Total extirpation of the uterus and adnexa is the proper procedure. It should not be necessary to mention that the curette should not be used in the pregnant uterus, unless, for some legitimate reason, it is decided to produce abortion.

PEPSIN AND ITS DIGESTIVE POWERS.

By PRESTON WORLEY, M. D.

CLOVIS, N. M.

Ever since antiquity the digestive function of the stomach has been known, but it was not until the year 1836 that Schwann discovered the digestive principles in the gastric juice, and three years later Wasmann and Pappenheim succeeded in extracting pepsin. In the year 1854 it was introduced into therapy by Corvisart, the body physician of Napoleon the Third. But it should be remembered that a chemical formula for pepsin has never been determined, as it has never been isolated in an absolute state of purity. It is, however, composed of the same elements as the albumoids, with which body it is usually classed. Owing to its peculiar properties it belongs to the ferments, that is to those homogeneous bodies which in the presence of water and at a moderately warm temperature are capable of producing certain chemical changes in other substances without themselves undergoing a substantial change. In the animal economy we find a number of such ferments secreted at different points of the alimentary canal, the ptyalin of the saliva, pepsin of the gastric juices, trypsin, steapsin and amylopsin of the pancreatic fluid, and the enteric ferments all play an indispensable part in converting the feed we eat into soluble and assimilable condition; this process we call digestion, the perfect operation of which is so essential to health and necessary for proper assimilation of food and consequent replenishment of wasted tissue. As the stomach is considered by many of the most important of the digestive organs, it is but natural for us to regard pepsin, its chief digestive principle, as a most important factor in gastric digestion. If nature fails to provide a sufficient quantity of this proteolytic ferment owing to weakness or disease, then it is that administration of pepsin is indicated. That pepsin is of value as an aid to certain forms of digestion is an acknowledged fact and, while physicians occasionally report unfavorably in regard to its use in medicine, I am disposed to ascribe such failures to incompatible combination, or to the comparative inactivity of the pepsin employed. It is, therefore, an absolutely necessary requisite that the pepsin used should be of high power and that nothing be combined with it to destroy its efficacy. As the incompatibles of pepsin are of particular interest to the physician, I will pass this subject in order to enable me to write more at length on the progress which has been made during the past twenty years in the manufacturing of chemical pepsin. One of the principal methods in use prior to, and since 1870, consisted in merely scraping the pulp from the cleansed mucous membrane of the pig's stomach and then powdering it, after being properly dried; viewed from our present knowledge, a more unwholesome preparation could scarcely have been devised. In the year 1871, one year before the discoveries, Mr. Emil Scheffer laid the foundation for a new pepsin era, and gentlemen, today we owe much to Dr. J. B. Hawley for the valuable information given us on the digestive powers of commercial pepsin; in his experimental tests, he tested four brands, of pepsin, as follows: Haughton's, Grimault's and Hawley's (his own preparation); the first of these give negative results, or digested nothing, while the other three digested respectively 4, 8 4-5 and 10 2-5 times their weight of coagulated egg albumen. One year later Scheffer made known his method of separating crude pepsin from the cold macerate of pig's stomach by precipitating the sodium chloride, and adding a sufficient quantity of sugar of milk to the pepsin pre-

cipitate to make one grain of the saccharated product dissolve 12 grains of albumen. By resolution of the first precipitate in acidulated water and subsequent precipitation, a purified article was obtained, which was capable of dissolving five hundred times its weight of egg albumen, in six hours, at a temperature of 105 degrees Fahrenheit. Following the research of Scheffer there appeared on the market the so-called peptone, or soluble pepsin, having a digestive power varying from 350 to one thousand. In preparing these pepsins, the mucous membranes of the stomach were made to undergo self-digestion by dissolving them in warm acidulated water, and concentrating the clarified liquid in vacuo and then drying on plates of glass. In this manner a readily soluble pepsin was produced, but it was soon learned that what had been gained in solubility was lost in permanency. The peptone which was formed during the digestion of the membranes was retained in the finished product, to which it imparted a highly hygroscopic and easily putrescible character. To remedy this serious objection, and yet retain the desirable quantity of solubility, the preparation of peptone was reduced either by partly preventing its formation during the preliminary treatment, or dialysis through parchment paper, peptone being a crystalloid and of greater diffusibility than pepsin. These improvements in the manufacturing of peptone-pepsin advanced the digestive power from one thousand to two thousand, but they did not completely overcome the difficulties, as a considerable quantity of peptone still remained associated with the ferment, and quite sufficient to cause such pepsin to assume a sticky or viscous condition when exposed to the moist atmosphere. It is evident then that a truly ideal pepsin is one in which the causes of putrefaction, hygroscopicity and insolubility do not exist. Chief among these causes are peptone and mucous, both inactive as digestive agents, but usually present in a greater or less degree in chemical pepsin as objectionable contaminations, the former lending a hygroscopic and the latter an insoluble character to the pepsin containing them. By the use of sodium sulphate at a moderately high temperature it has been demonstrated that in separating pepsin from peptone without injury to the ferment, this discovery (coupled with certain methods of purification) has made it possible to manufacture a permanent and soluble pepsin, substantially free from peptone and mucous, and possessing the extraordinary power of digesting six thousand times its weight of coagulated egg albumen by the usual six hour test. This brand of pepsin is known in commerce as Webster-pepsin, and although its greater activity makes it intrinsically more valuable than any other similar product on the market, it being the highest standard of pepsin, one grain having the power of dissolving four pounds of coagulated egg albumen, thus making its digestive strength about one-twentieth five thousand; and, gentlemen, in my judgment if this essential preparation could be obtained in a strictly purified state, it would have the power of digesting one hundred thousand times its weight of coagulated egg albumen. Now gentlemen, having presented a brief review of the different phases through which pepsin has passed since its introduction to our profession, I desire to express my thanks for the courtesy which you have been pleased to extend to me on this occasion.

Read before the Southeastern N. M. Medical Association, Roswell, April, 1910

THE SANITARY NEEDS OF SANTA FE.

By JAMES A. ROLLS, M. D.,

SANTA FE.

Address Delivered before the Chamber of Commerce, Santa Fe, N. M.

Mr. President and Gentlemen:

To obtain a proper view of this subject it seems to me we should first of all review the situation in a general way as it might apply to any city of this size and then try to estimate what may seem to make our city exceptional, either from the standpoint of its natural environment or from any lack of sanitary precautions by its citizens.

A good many years ago I was assistant medical health officer of a modern city of about ten thousand inhabitants and as this city was rather exceptionally well governed I shall outline our general plan of campaign. We had a Board of Health consisting of three aldermen who in turn selected a medical health officer and with this simple organization as a starting point we tried to put in force three general propositions:

1st. To allow nothing to enter the city that would be apt to breed disease.

2nd. To remove from the city as rapidly as possible anything essential to city life that would in turn be a menace to public health.

3rd. To disseminate as broadly and thoroughly as possible among the people such common knowledge as to the origin and nature of contagious diseases as would prevent them from needless risk and exposure.

Simple as these propositions may seem to you they cover nearly every point that conduces to health either in the individual or in the city for as a matter of fact the prevention of disease in a community is in many ways doing on a larger scale only what we try to do in preventing the disease in the individual. For instance, if any one of us would allow nothing to his body but pure wholesome food and water and pure fresh air; would attend to the proper daily cleansing of his body and removal of excreta, and would use ordinary precautions in avoiding contagious diseases the chances of his living a long and healthy life would be increased probably 100 per cent, and so it would be with men in the city if a city were so cared for. Taking up the three headings above noted in order, under the first the three most important factors are: 1. The water supply; 2. The food supply; 3. The quarantine against contagious diseases. In connection with the water supply the history of almost every hamlet in this or any other civilized country has been the same and wise men learn from history: the first settlers or inhabitants dig wells which even the most ignorant keep as far as possible from cess pools, manure piles and other sources of contagion—later on as the population increased and houses get closer and closer together it is found that the surface soil gets more and more contaminated and that first one will and then another which for years had yielded the purest of water has become a source of typhoid or other disease and a final resort is always had to a system of piping from one or more reservoirs situated above the city and fed in turn from a source that can be kept under constant scrubbing. Practically the matter comes to this that if everybody gets water from our that source can and should be kept under constant observation as to its purity, whereas if each citizen has his own source of supply it becomes impossible for any health officer, board of health, to sure that all are free from infection and

we know by either experience that one source of infection may start an epidemic that will spread over an entire city. Next to the food supply—this is very well handled upon the whole by the national government's Pure Food Law, but it remains for each community to look closely to its slaughter houses and milk supply. Several of the worst epidemics of scarlet fever and typhoid on record have been traced definitely to an uninspected milk depot and the number of deaths among young children during the summer months from this cause is enormous.

Under the second heading comes the removal of garbage and excreta and the isolation of contagious diseases.

As to the removal of garbage it is ordinarily done as in Santa Fe by being deposited by each householder in a covered bin and later removed by wagons. The removal of excreta, however, is a different matter, and like the water supply has a pretty uniform history in all cities.

First, there is the period during which each house has its private cess pool, then as the houses get closer together and the yards smaller it becomes evident that there must be a limit to this and a resort is often had to the dry pan method, but both of these are disgusting and in the end it has been found that a system of sewers is the only way of keeping a city free from this most public cause of disease.

I need to say nothing regarding the reporting and quarantining of contagious diseases as you are all familiar with the approved method.

I wish, however, to emphasize the third point, namely, the dissemination of common knowledge as to the nature of certain contagious diseases. This is one of the most important factors in the sanitation of a city, and it is year by year being made more by enlightened Board of Health. The aim, is, of course, to instruct each individual in the community how best to avoid the dangers of scarlet fever, diphtheria, tuberculosis, and last and perhaps most important of all the danger of venereal disease. I cannot, of course, begin to tell what each city is doing in this line, but I have here a more or less complete list of the publications of the Indiana State Board, which will serve as an illustration.

Having in the above crude manner sketched the general plan upon which in any average city the lives of its citizens are cared for, I invite your attention to our local conditions and ask you to consider how near we come to conformity to this standard, or what is more important how near we can come to it. I find upon looking into the law that have an approved start for an organization as the Compiled Ordinances of 1900 provide, that the Mayor, City Clerk and two members of the council shall constitute a Board of Health with ample powers to act for the welfare of the city—here, however, the latter ends as the most important factor in the case, the medical health officer is missing—investigation shows that the cause given for the non-appointment of such an officer is lack of funds. I wish to register my opinion to the effect that this is not a good and sufficient reason. The city has in hand an income of about \$10,000.00 which will probably be increased next year to \$20,000.00—\$300.00 out of this fund would be enough to pay a public spirited physician for attending diligently to the simple duties enumerated in this paper as well as for acting as a coroner and thus avoiding the repetition of the blunders made in the Montgomery case last fall. (The school board might also arrange for examination of the children in the public schools). I honestly believe that it would pay this city to economize with their expenditures for police protection, garbage removal, attorney's fees, etc., and employ a competent medical health officer. We

are all in the habit of considering our taxes high enough, but if any tax payer thought a dollar or two extra would save the life of his child how gladly would he pay it, and yet it is a fact that the division of some of this money for the employment of a medical health officer or the raising of a small extra fund for that purpose would result in the annual saving of not one, but many lives—among them may be or may not be my child or yours.

Passing from this back in the line of general organization to the various steps in sanitation noted above, I would say: As far as I know there has been no sickness due to the city water, but at the same time this is due to the care of the company and not to any supervision on the part of the city. We have as you all know a most exceptional condition for the supply of pure water to our city, and one which if properly conserved will bring us hundreds of residents who hesitate on this very score to locate in neighboring cities. Our water comes from a mountain stream absolutely uncontaminated from its source to its reservoirs by a single human habitation, and if we do not take care of this priceless asset it will be to our everlasting regret. It is a fact that has been repeatedly demonstrated that a single individual, who has recently recovered from typhoid, camping on the banks of a stream can so infect the entire water supply as to start a wide spread epidemic in any city supplied from that source.

As to the removal of filth from the city nothing but our enormous natural advantages in the way of natural drainage, maximum sunlight and dry air has made the present state of affairs even tolerable. Our present public spirited Mayor, Mr. Sena, has done a great deal by insisting on the garbage removal but we need a sewer system instead of cess pools. If there is to be any delay in this respect let us at least have pure water supplied to every family. It is bad enough to have the filth go into the ground on which we live, but altogether too bad that it should come back to us in the shape of well water.

The isolation of contagious diseases and the disinfection of houses is being very well carried out (and here again I cannot say too much as to the efforts of Mr. Sena) and taken with the attempt of the B. of L. to limit the danger of T. B. by their campaign against expectorating in public places puts us on fairly good footing. I wish, however, to make two suggestions here, and these are:

1st. That no public funeral should be held without a certificate from the physician who conducted the case or from the city physician, if no doctor was employed, to the effect that death was not due to a contagious disease.

2nd. That if a child is absent from school on account of sickness, other children from the same house or this same child upon his return to school should not be admitted without such a certificate.

If physicians were supplied with little printed slips requiring only their signature both points could be covered with surprisingly little trouble.

I have now come to the point where I think perhaps most good can be done largely because practically nothing at all has been done and that is in regard to the dissemination of common knowledge regarding infectious diseases, and more particularly regarding the prevalence and danger of venereal disease. There are two main reasons for apathy in this matter, the first is that each of us is apt to think that he is in no personal danger unless he chooses to take the risk by visiting a bawdy house, and the second is the prevailing idea that it is only once in a while that some foolish young man becomes infected and that perhaps after all it serves him very well right.

I do not hesitate a minute to say that each of these beliefs is as far from the truth as one can reasonably get. I don't propose to gloss over this part of

the subject. I take it that every man here is interested in the sanitary condition of this town. I will say, therefore, that owing to an entire absence of those factors which in most cities warn young men and women of the nature and danger of venereal disease (I refer to a campaign of education and to such excellent organizations as the Y. M. C. A.) ; we have in Santa Fe a most alarming condition of affairs. The lowest estimate that I have heard from any local physician, and they are the only men able to judge, is that 85 per cent of all the young men in Santa Fe have at least one form of venereal disease before they reach the age of 21 and many of them have been repeatedly infected. I regret to add, although it is more difficult to give figures, that a very large number of our young girls are also victims. This is bad enough but the matter does not rest here; these young men marry and their wives become infected and later on the sins of the parents are visited up the children. It has been estimated that 75 per cent of all operations performed upon women are due to this cause. That 25 per cent of all cases of blindness likewise come from this source, and finally that one in every five of all the citizens of the United States are victims of venereal infection (in France this percentage is much higher). It is a good thing to fight against political dishonesty, but as a matter of practical importance I would far rather have ten men steal \$1,000.00 each from our county funds than have my child or yours needlessly infected with disease.

I should like to see a city physician appointed after being nominated by and made responsible to the medical society. I should like to see a sewer system installed and a closer watch kept on cases of contagious disease, but more immediately pressing than all these and I believe productive of more good, I should like to see an organized effort for the suppression of venereal disease.

As to what form this effort should take I can assure you that it is most difficult to say. Here is one of the places where the medical health officer fails because if he be too lenient his inspection of the brothels gives only a false feeling of safety to the habitués and if he be as strict as he should be he disqualifies practically every public woman with the result that the houses are closed and clandestine prostitution take their places. I have not time tonight to go into this subject as fully as I should but will only say that the greatest students of this phase of sanitation have come to the following conclusion:

No sane young man or young woman would willingly take the risk of ruining his or her health or career in life, as they do every day, if they were fully aware of the imminence of the danger of infection and the possibilities for lasting harm which these diseases hold. In other words it is knowledge which these young people need, and it is by supplying this knowledge that most can be done toward making our people clean in mind and body.

I shall conclude by giving an idea of three of the practical ways in which these diseases are being fought in some of our best governed cities:

1st. The young men and women should be taught systematically certain plain and wholesome truths about sexual matters just as they are taught algebra or geography or a hundred other things not nearly so useful to them. This instruction, undoubtedly should be begun in the home before the age of ten and confirmed in the schools as the children get older. I understand that today at Leland Stanford mixed classes of young men and women are taught sexual hygiene just they are taught mathematics and with the most salutary results. I should like to read you a page or two of a publication which the State of Indiana tries to put into the hands of every parent interested in this matter. * * * I have here also several other publications which are distributed gratis and

which it is estimated result in the annual saving of many lives and much sickness.

2nd. A fight to the finish should be put up by the authorities against clandestine prostitution and street soliciting. It has been estimated that very few young men take their first step by deliberately going to the brothels—almost always the way is paved by some street adventure.

Lastly an attempt should be made to give the young men something else to do and to think about. It is being realized I think more and more that the way to achieve any real good is not by saying don't do this or that but by pointing out a better course. In this way has sprung up the church association work, the reading rooms, card rooms, billiard rooms, athletic organizations and I believe most potent of all because best organized and broadest character is the Y. M. C. A. I have talked with a fair number of the young men of this town and it would surprise a good many of you to know how much they regret that we have not such an organization. As some of them have said to me with only the choice of staying in our rooms or meeting at the poor man's club (meaning the saloon), how do you expect us to pass the evenings? There has been some talk of a Commercial Club and Board of Trade Building that would give facilities for social enjoyment, besides acting as a business center. Could not this idea be enlarged so as to include a gymnasium and a swimming pool? If so, it would enlist support of a temporary and permanent character that would add one more decided attraction to our town.

BOOKS REVIEWED

The Conquest of Disease Through Animal Experimentation, by James Peter Warhorse, M. D., Surgeon to the German Hospital, Brooklyn, N. Y., Member of the A. M. A., American Association for the Advancement of Science, etc., Author of "Medical Sociology." small 8 vo., 176 pp. New York and London: D. Appleton and Company, 1910. Price. \$1.00.

The little book is timely. The information given to the public therein is valuable. It is one of the small number of books which the physician should recommend his clients to read. We refer to the editorial "Pseudo-Science—Antivivisection Movement."

The Sexual Life of Woman in Its Physiological, Pathological and Hygienic Aspects. By E. Heinrich Kisch, M. D., Professor of the German Medical Faculty of the University of Prague; Physician to the Hospital of the Spa of Marienbad, etc. Only Authorized Translation into the English Language from the German, by M. Eden Pane, M. D. Octavo, 686 pages, 97 illustrations. Rebman Company, New York, 1910. Price \$5.00.

This book, which has been known to the writer in the original for several years, is a valuable addition inasmuch as it not only gives so much original work but compiles, in a most exhaustive manner, the knowledge of the subject. The author makes what he considers a natural division of the book which is furnished by the three great landmarks of the sexual life of women; the onset of menstruation, the menarche; the culmination of sexual activity, the menacme and the cessation of menstruation, the menopause.

The student, fresh in this matter, will find at once the various sexual phases and processes described and analyzed which he cannot find in the usual textbooks of diseases of women or midwifery.

The book, somewhat shortened, the language made plain to the layman, ought to appear in a popular edition.

Modern Surgery, General and Operative, By John Chalmers Da Costa, M. D.; Professor of Surgery and Clinical Surgery in Jefferson Medical College; Surgeon to the Philadelphia General Hospital; Consulting Surgeon to St. Joseph's Hospital; Fellow of the American Surgical Association; Member of the American Philosophical Society;

Membre de la Societe Internationale de Chirurgie; Member of the Medical Reserve Corps, U. S. A. Philadelphia. W. B. Saunders Company, 1910.

Da Costa's surgery was always considered as a leader amongst the one-volume books. The new edition appears to us like a child outgrowing his cloth. The next edition cannot be condensed again into such a minimum of space. Much is new. Rosenberger's theory of tubercular bacteremia is recognized and his citrate method described amongst diagnostic techniques.

Amongst the new subjects we find: Crile's arteriovenous anastomosis for affecting transfusion of blood; Brewer's tubes for transfusion; the use of Halstead's aluminum bands in the treatment of aneurysm; the operative treatment of recent fractures; Horsley's operation for chronic spinal meningitis; the use of positive and negative air pressure in intrathoracic surgery; Murphy method of treating acute peritonitis; Cushing's operation of decompression for brain tumors; Bier's intravenous local anesthesia; the parathyroid glandules; the intraglandular extirpation of goiter; the Lorenz treatment of hip disease by weight bearing and fixatiin; gunshot wounds in war; Bier's treatment of inflammation; Wright's views on inflammation; immunity with a sketch of antibodies, of opsonins, and of phagocytosis; bacterial vaccines, untoward effects of sera; tuberculin in diagnosis; human glanders; Wassermann's reaction for syphilis; the serum diagnosis of cancer; acute dilatation of the stomach, mesenteric cysts, congenital idiopathic dilatation of the colon, teratoids and dermoids of the sacrococcygeal region; radium, electrical injuries, and the x-rays.

Nutrition and Dietetics. A Manual for Students of Medicines, for Trained Nurses, and for Dietitians in Hospitals and Other Institutions. By Winfield S. Hall, Ph.D., M. D., Professor of Physiology, Northwestern University Medical School; Lesturer on Physiology and Dietetics in Mercy Hospital and Wesley Hospital, Chicago. 8vo, pp. x., 315. New York: D. Appleton and Company, 1910. Price cloth, \$2.00 net.

This is an excellent text-book and it should admirably fulfill the purposes for which it has been written.

Hall did not follow the usual routine when dealing with nutrition and dietetics. In order to make each special phase of assimilation readily understood he enters more, but at the same time concisely, into the rudimentary of organic chemistry of our body and the changes of the food therein.

The whole book is written in a way which will not tire the student and at the same time is useful to the practitioner.

That the laws of nutrition have been entered into is only an advantage. That the language of the book is so simple that student and nurse can understand it makes it more valuable as a primer knowledge of nutrition and dietetics. The usual bulk of recipes is left out; an appendix supplies the need. We congratulate the author for doing so because this part ought to be relegated entirely to the nurse. The book is up to date and deserves a large circle of readers.

The Propaganda for Reform in Proprietary Medicines; Sixth Edition: Containing the various exposes of nostrums and quackery which have appeared in The Journal of the American Medical Association. Price, Paper, 10 cents; Cloth, 35 cents. Pp. 292. Illustrated.

This book presents in convenient form most of the exposures that have appeared in The Journal of the American Medical Association showing fraud either in the composition of various proprietary preparations or in the claims made for such preparations. Not all of the products dealt with, however, are such as are—or have been—used by the medical profession. Many preparations of the "patent medicine" type have been subjected to analysis and the results of such examination appear in this volume. The book will prove of great value to the physician in two ways: 1, It will enlighten him as to the value, or lack of value, of many of the so-called proprietaries on the market; and 2, It will put him in a position to answer intelligently questions that his patients may ask him regarding the virtues (?) of some of the widely advertised "patent medicines" on the market. After reading the reports published in this book physicians will realize the value and efficiency of simple scientific combination of U. S. P. and N. F. preparations as compared with many of the ready-made, unstable and inefficient proprietary articles.

New and Nonofficial Remedies, 1910: Containing descriptions of articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association, prior to Jan. 1, 1910. Paper. Price, paper 25 cents; Cloth, 50 cents. Pp. 256.

This is the 1910 edition of the annual New and Nonofficial Remedies, issued by the Council on Pharmacy and Chemistry of the American Medical Association, and contains descriptions of all articles approved by the Council, up to Dec. 31, 1909. There are also descriptions of a number of unofficial non-proprietary articles which the Council deemed of value. The action, dosage, uses and tests of identity, purity and strength of all articles are given. As an illustration of the scope of the book, attention is called to

the following: The articles on arsanic acid and its derivatives, page 35; on phenolphthalein, page 152, and on epinephrine, page 73, indicate the effort which the Council is making to have new remedies known by their correct names. The description of medicinal foods, page 120, should put physicians on their guard as to the small value of such products. Particular attention is called to the description of serums and vaccines, page 169. Since our knowledge of the therapeutic value of new remedies is still largely in the experimental stage, the statements which appear under each proprietary article are based largely on the claims made by those interested. On the other hand, on page 56, under creosote carbonate, is a note on the claims of non-toxicity often made for certain remedies. A similar caution in reference to the claimed harmlessness of intestinal antiseptics appears on page 41 under beta-naphthol benzoate.

Pocket Therapeutics and Dose-Book. By Morse Stewart, Jr. B. A., M. D. Fourth Edition, Rewritten. Small 32mo of 263 pages. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$1.00 net.

The booklet appears in small form, convenient to be carried in the satchel or to occupy a very limited space on the desk.

ANNOUNCEMENT

This month the first number of the Physicians' Business Journal will appear. Same is edited by P. B. Thatcher, Md., 310 Bulletin Building, Philadelphia.

The scope is to be restricted entirely to the business interests of the profession. The Editor promises to carefully conduct it along ethical lines and in no way encourage commercialism in our profession. We hail the appearance of this Journal with joyful anticipation because the abnormal economic conditions of the present time encroach upon the physician in his income by not permitting a corresponding change in his revenues.

NEWS

Colfax County Medical Society held a good meeting in the offices of Jas. J. Shuler, in Raton, at 8 P. M., Friday, April 29, 1910. A large number of the physicians of Colfax county turned out. Jno. L. Hobbs of Gardner read a paper entitled "Appendicitis." An interesting discussion, in which every man in the room was heard from, followed and many good points were brought out. Operation, non-operation, and Ochsner's treatment were freely and intelligently discussed, the program alone causing each doctor to feel repaid many times for attending the meeting.

At 11 o'clock, the Society adjourned in a body to the Seaberg Hotel where a seven course banquet was served, after which the annual election of officers was held with the following results: President, Chas. E. Gayer; Vice Pres., Geo. W. Cleaver; Sec'y and Treas., Jno. L. Hobbs, Gardner; Delegate to Tr. Society, Jas. J. Shuler; Alternate to Tr. Society, L. L. Cahill, Springer; Member Board of Censors, T. B. Lyon.

The following resolutions were adopted: Resolution No. 1:

Resolved that Colfax County Medical Society adopt the "Chicago Resolutions" as printed in the Journal of the A. M. A. page 382, January 29, 1910, and that our County Secretary report the adoption of the resolution to the Secretary of the Territorial Society and also to the editor of the New Mexico Medical Journal.

Resolution No. 2:

Resolved that Colfax County Medical Society desires the Territory of New Mexico at the meeting for the Revision of the U. S. P. for 1910, and that our Secretary request the territorial council to appoint a representative for New Mexico to attend this meeting.

Suggested that our secretary report our meetings to the editor of the territorial Journal, and that each member of our organization take it upon himself to keep him informed in the matter of the medical news from our county. Next meeting to be held in June.

ESPERANTO IN NEW MEXICO.

The following physicians have joined societies for the study of Esperanto: A. Masie, D. Knapp, Chas. Frank, G. L. Rice, J. W. Elder, Taylor Goodman, F. T. B. Fest, E. B. Shaw, J. W. Elder and F. T. B. Fest are the presidents of the societies at Albuquerque and Las Vegas.

The New Mexico Medical Journal

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JUNE, 1910

Number 9

EDITORIAL



ROBERT KOCH



Koch is dead. A prince of science, a master, who more than any one man living has stayed the grim reaper Death, the greatest scientist of the day has ceased his work in body, but the fruit of his work will live, the benefit of his knowledge will last, because:

"The living do not rule this world. Ah, no,
It is the dead—the dead."

There is no need to give a biography. Every publication will do so; parliaments bow low and honor the great dead. We are filled with awe that this master mind is no more.

We are numb when we remember what this king of science has done. From nearly rudimentary he created and developed an important branch of the science of medicine. Other great men stepped from stone to stone. Semmeleiss opened the field of antiseptis, Lister and Pasteur followed and all at once appeared Robert Koch and ousted all. Anthrax, cholera, tuberculosis, etc., became known in their true nature and other discoveries followed.

The time will come that Napoleon, the destroyer, Grant, Kitchner and Molke, the slayers, are heroes of fables; the time will come that nations settle disputes in courts of national equity; that no more lives are sacrificed to burnish the glory of a crowned head; the time will come when tuberculosis fells its last victim and then the historian will look back to the Askelepios of our times, Robert Koch, who opened the avenues of defeat for the White Scourge of the human race.

Then will have come the time when the great man will be rewarded by the greatest honor.

If the poet is true:

"He is not dead

Whose good life's labor liveth evermore,

He is but sped

To join the noble spirits gone before:

He is not dead."

Then Robert Koch is living, his work cannot die.

THE DEPARTMENT OF PUBLIC HEALTH

What have we done to support the bill introduced by Senator Robert L. Owen?

The arguments of the Senator are strong. He gives full credit to the committee of One Hundred; he points out the possibility of prolonging life and shows the faulty organization of our federal government in regard to health matters.

Senator Owen when introducing the bill pointed out that for the present friscal year the United States has appropriated for sanitary and health purposes the following amount:—

| | |
|--|---------------|
| Department of Commerce and Labor | \$ 533,000.00 |
| Department Navy | 1,827,428.00 |
| Department War | 6,400,734.00 |
| Department Treasury | 2,512,733.00 |
| Department Interior | 1,748,350.00 |
| Department Agriculture | 1,275,820.00 |
| Department State | 3,405.79 |
| Bureau of Public Printer | 7,270.00 |
| District of Columbia | 663,680.00 |

\$14,972,320.79

This does not include the service in the Philippines, Porto Rico, Cuba, nor one hundred and fourteen physicians and twenty-eight nurses among the Indians, nor the hundred and odd clerks in the medical division of the Pension Office, nor the medical attention to sick prisoners nor the collection of medical statistics by the Census Bureau.

There are over 12,000 persons employed by the government in public health and sanitary service not including those in Porto Rico, Cuba, Panama, the Philippines or the Agricultural Department. These agencies should all be consolidated into a new department, the treatment of public health.

We do not know whether we shall have a Department of Public Health now or not. It must come sooner or later and the signs of the times are that the realization is not too far off because the traffickers in the "Great American Fraud" are combining to fight Owen's bill, they call it "The Doctor's Trust." But not all the people can be deceived all the time. The public, a large part, begins to feel the beneficial influence of the Pure Food Law.

It is strange that the Federal Government protects our hogs and sheep more than our children.

Every citizen is entitled to a copy of Senator Owen's bill and each practitioner ought to be acquainted with same and help to support it.

WHAT IS A QUACK?

The question was taken up by some exchanges lately; the definition seems well given.

"..... A man may be very unethical, and yet be a capable practician of medicine, who does the best he possibly can for every

one who employs him. Such a man is certainly not a quack, tho he may be a very "undesirable" member of the profession.

We know men whose "quackery" consists in frightening the patient into the belief that their malady is worse than it really is; and this is their only unethical act. We know the most objectionable "quacks," who are graduates of the best medical schools, and who are well equipped and who employ skillfully the best and latest drugs, but their quackery consists in making the patient believe they are the only men who can cure this particular affection, and in exhibiting their equipment of instruments and putting the patient through ridiculous "tests" and "examinations," thus creating undue alarm, so that they may extract an exorbitant fee. We once knew such a man to use a stethoscope and assure his trusting patient that he was undergoing an "x-ray examination."

A "skillful" quack can practice his blandishments on a patient, and yet say nothing and commit no overt act that would indict him before a medical society. He may be so bland that no decent practitioner can recognize him, and there are all shades and degrees of distinction between these two extremes. Therefore we do not believe "quack" can be defined.

A man might advertise and make true and honest statements; he may be skillful and well quipped; he may do the best possible practice he can; yet such a man would be branded as a quack, because custom forbids advertising. A man may be the lowest type of a "quack" and yet never advertise, nor commit any act that could be properly and positively assailed; he may be a member of numerous medical societies, and prate loudly of ethics; and yet in contact with his patients he may in a thousand ways live the life of the most contemptible quack."

Or:

"..... Let me plead with the doctors to frown upon abortions and to accentuate a spirit of brotherly love. Let us go back to the day when the doctor was an important man in his town, a big man in the country and an honored citizen in the city. Let us go back to the old days of courtesy and ethics. Do not go into a house and pitch out of the window medicine left by a brother practitioner. Do not say you can cure certain diseases you know are incurable. Do not say: "Madam, had I not come just at this moment your child would have been dead," and "this one remedy is the only one which will save him." Do not tell a poor heart-broken mother that her child has a disease which you know it has not. Don't say to the poor old mother: "Your child is *threatened* with diphtheria, pneumonia, etc.," when you know this to be untrue, for one either has a disease or has it not and cannot be threatened with it."

The worst quack is not the open quack, but that man who just had enough learning, cramming or coaching to obtain his diploma and license, perhaps even an appointment, who must make a living by the practice of medicine. They do not advertise in newspapers; they advertise themselves by hanging around the street corners and making themselves popular. They blow their own horn. People will notice that they are shunned by the honest and studious practitioner. They make capital out of this disgrace. They knock the "Doctors' Trust" and play the martyr of an inferior but jealous profession. They admire each woman's children as the "brightest," carry

candy in their pockets and peddle religion to the pious and frivolity to the sport. Their tongue is their stock in trade. Professional intercourse they avoid. Not to display their ignorance to the public they tell that they are abused.

As a rule they are liars, brazen bluffers, slick enough to remain within the appearance of ethics; yet

Why are such men suffered in our organizations?—Untruth is unbecoming a gentleman; a physician must be a gentleman.—Let us be consistent and exercise all foul ulcers.

ORIGINAL ARTICLES

OBSCURE TUBERCULOUS ADENITIS

By Francis T. B. Fest, M. D., Las Vegas, N. M.

It can be said that tuberculous infection of the glands of the cervical region is a daily occurrence, next comes infection of the mesenteric, bronchial and mediastinal glands, then of the axillary and mammary and least of all of the inguinal glands. To recognize the nature of enlarged cervical glands is, as a rule, not difficult, yet syphilitic glands have been mistaken for tuberculous and excised.

In the groin every large gland is suspected as being the complication of some venereal lesion or infection. Only when the long duration of suppuration, the general condition of the patient and perhaps pulmonary disease causes anxiety a closer investigation is made.

The literature on this subject is meagre and beyond occasional casuistic of small value while we may have to deal often with an occurrence which I consider to be of diagnostic value. I believe that enlarged inguinal glands frequently are the very first clinical manifestation of tuberculosis, that these chains of nodules deserve more attention than is given to them now. *I found that in many instances, where they occurred, the specific reaction was positive and yet no lesion could be detected in the lungs.* I lay stress upon this, because I believe that specific medication in such cases would be ideal.

While tuberculous adenitis of the original and axillary region has been recognized; the explanation for this occurrence, namely a wound infection of the extremities, as a rule the so-called "*anatomical tubercle*," is far from being satisfactory.

Our opinion in regard to the genesis of tuberculosis has changed. We know that the local tuberculous breakdown is preceded by a tuberculous bacteremia. This also explains why lymph glands anywhere in the body may become tuberculous before there is any lesion in the lung. While the pulmonary tissue is the seat of predilection of tuberculous infection, such may occur there secondary to other localized processes.

It is not my intention to give a casuistic. The field is wide and I see

the opening before me and same unexplored with the exception of a few facts which, as I said before, I consider of diagnostic value. Multiple small nodules in chains or grapes which, in the inguinal region, are not confined to the groin itself, but extend down the thigh, over the flanks and through the rings or behind the ligaments, are suggestive of tuberculosis.

Glands which were stationary for a long time, and when there is no other sign of venereal infection, need investigation, and this consists in the tuberculin test. That mercury brings about a diminution in size or disappearance is no proof against tuberculosis because in just such glandular tuberculosis mercury may be of very great value.

We must not lose sight of the relation of mesenterial infection and secondary infection, of the inguinal glands, even if the process in the latter structure should be more active. Suppuration of tuberculous mesenterial glands may simulate malaria, typho-malaria, typhoid, dysentery, colitis, enteritis, etc. Should there be, in such cases of a typical appearance, adenitis in the inguinal region, we are justified to suspect tuberculosis and we must make specific tests unless other clinical findings have demonstrated the true nature of the disease.

We must not forget that a mesenterial abscess may discharge into the bowel and an apparent cure take place while the inguinal adenitis may go on and here tuberculin will be of greatest diagnostic value.

There is a similar relation between the mediastinal, bronchial glands and the mamma and lymphatics of the chest. I have under my care now a case which is of interest and the surgical side of which I hope to be able to report later. There exists an abscess of the lung, indurated glands of the mamma and over the site of the abscess, from between the ribs over the abscess, start chains of fine hard lymphatics.

The treatment is specific. If the involvement is large, if there is fever and signs of activity the treatment is purely surgical and must be as radical as possible. The course of the knife may be beyond the external abdomen leading to intraperitoneal foci.

BRONCHO PNEUMONIA

By J. Dale Graham, M. D., Artesia, N. M.

Broncho pneumonia is known by various synonyms—lobular pneumonia, capillary bronchitis and catarrhal pneumonia. The preferable term is a debatable proposition, however most authors describe this pulmonary inflammation under the caption—broncho pneumonia. The fact that the smaller bronchioles are affected uniformly throughout the disease, leads me to select the name as given for this paper—broncho pneumonia. The first departure from normal in this malady is a tracheal and bronchial congestion and closely following we find the lumen of the smaller bronchioles filled with a tenacious muco-pus, occasionally sanguinous. Passing from this condition, we have occlusion and consequent atelectasis. In this manner we may have areas from the size of a small shot to the size of a pea affected. With a gradual increase of the lesion we have a lobule or lobules involved—hence the name, lobular pneumonia. In fact, in the same way, we may have a whole lobe affected with this gradual inflammatory process. Fischer sums

up the pathological anatomy by saying: "The whole process seems to be a bronchitis, associated with a circumscribed atelectasis of the lung, from which hyperemia and infiltration of tissue result."

Broncho pneumonia may be either primary or secondary. In Holt's series of 443 cases about 33 per cent were primary. Conner with a large number of cases agreeing with about the same per cent.

The etiological factor in many cases is the pneumococcus and in the clinical picture we find much resemblance to croupus pneumonia.

Further, etiologically, we may mention the predisposing conditions, such as the scrofulous, rachitic, tuberculous and syphilitic. Seasons also must be considered—70 per cent occurring during the cold months.

Secondary broncho pneumonias have for their causes, the infectious fevers of childhood—measles, whooping cough, diphtheria and scarlet fever particularly being offenders. Later in life typhoid, small pox and erysipelas form a suitable field for development. Iliocolitis and Lagrippe may also be mentioned as occasional causes.

Deglutition and aspiration pneumonias may be classed as secondary types. Infectious conditions about the air passages may induce aspiration pneumonia during anaesthesia, fluid from bronchiectatic cavities, blood from pulmonary hemorrhage or pus, are met with as causative factors, also fluids or solids from esophageal or laryngeal tumors. During an epidemic of the acute infectious diseases, there will be a corresponding proportionate number of broncho pneumonias. Age plays an important roll—this disease being one of the extremes of life—middle age being comparatively free. In striking contrast to many of the diseases of early life, the nursling does not carry a relative immunity. The aged die frequently of broncho pneumonia—occurring as a climax to such disorders as diabetes, nephritis and cardiac diseases. Further we may mention as predisposing factors, cold, damp and changeable weather. Consistently then we find this dreaded disease prevalent during the winter and spring months. Still other predisposing causes are poor food, poor clothing, bad air—in fact any condition which lowers resistance may be mentioned as an etiological factor. As a natural consequence it follows that broncho pneumonia is common among the over-worked and poorly-clothed inhabitants of the tenement districts of our cities.

The fact is, the tenement life of the little tot furnishes an environment greatly conducive to this disease so fatal among them.

No specific bacterium has yet been isolated as the causative agent—however the pneumococcus is *fairly constant*.

The symptoms of broncho pneumonia are essentially varied, arising as they do from such a variation of causes. Usually the symptoms follow a bronchitis, which in turn has been induced by some infectious condition of the upper air passages. So, we may say, for the most part, the symptoms are insidious. For instance, a quickened pulse, an accelerated respiration, moderate fever, slight or severe cough and some prostration, suggests an ordinary cold of more or less severity. The parent, after a few days' treatment finding the symptoms uncontrolled by domestic medication, calls the family physician who finds an intensification of the former symptoms. The little one is resting with aggravated coughing, respiration reaches 75 and pulse 150, or even greater. Later, cyanosis of face and extremities, dilating

nostrils and laborious use of the accessory respiratory muscles furnishes a vivid picture of the human necessity of air.

The fever alluded to varies greatly and may, in rare instances, reach 108. Pulse, always fast, is in some instances unaccountable. Heart action may become weak, with right side dilatation. Anorexia and thirst are usually present and often a diarrhoea produced, no doubt, by the cold which predisposed the little fellow to the broncho pneumonia.

In contradistinction to lobar pneumonia, herpes labialis is rare in this pneumonic inflammation. The foregoing picture is modified depending upon the foci of consolidation. The clinical depiction in the primary form is often very much like the lobar variety, sudden onset ending by crisis.

The physical signs are variable and inconstant. Even when present, a considerable degree of consolidation, the compensatory emphysema will mask the true symptoms.

Marked dullness is only elicited when the areas of consolidation become confluent; a condition termed a massive consolidation. Early auscultation reveals only the signs of bronchitis—moist, fine sub-crepital rales. In the elicitation of symptoms, especially in the physical examination, the lower and back part of the chest should receive very careful attention as it is here the first physical signs are found, as a rule.

The diagnosis in children is, as a rule, easy. The busy physician during convalescence in the acute infectious diseases, must be ever on the alert. An acute exacerbation should suggest a careful examination of the chest. In the ages, especially those with chronic diseases, broncho pneumonia may be easily overlooked, from the fact that the pulmonary signs are frequently overshadowed by the severity of constitutional symptoms. Having come on during a chronic condition of, for instance, diabetes or nephritis, we are apt to jump at the conclusion that the aggravation of symptoms is a severe constitutional reaction to be expected. This mistake may easily be made in chronic tuberculosis.

The prognosis in every case is exceedingly grave—the gravity bearing a direct proportion to the age—no disease carrying the heavy mortality list as broncho pneumonia. Those cases following measles and diphtheria are especially grave—70 per cent proving fatal.

The final issue depends much upon the previous condition of health, the general hygienic surroundings and environment. The results of the writer's experience and that of the profession in New Mexico bear out the statement, that the prognosis in this climate is not nearly so grave as that stated by our Eastern authors.

The treatment seems as important as it is often futile. The first indication is to free the bowel of any offending matter and this is best done by calomel followed by a sweeping dose of castor oil. The calomel not only evacuates the bowel and acts as an intestinal antiseptic but it awakens secretions and aids general elimination—a factor in the treatment of the broncho pneumonia which must ever be kept in mind. The management of a case must be symptomatic—no specifics being recognized.

For fever hydrotherapy holds the honor place. Compresses at the temperature of the room are warmly recommended by most authors—these to be changed frequently enough to keep temperature within bounds.

This method of antipyresis stimulates deep respiration, distending the alveoli, preventing atelectasis. The German authors advise the use of 5 gr. doses of quinine, per rectum, when a febrifuge is indicated. A warm bath must be given daily to insure a good skin action, thus favoring elimination which, as stated, is of great importance in the treatment. Great dyspnoea, according to some of our best men, should suggest an emetic. For such may be used Sulp. Co. Gr. 1, repeated if necessary; tartar emetic 1-10 Gr., Syr. Ipecac, etc. Great caution and fine discrimination must be shown in the use of emetics. Do not use them with an empty stomach. Give some food and a free drink of water. If weakening and carbonic poison are already present vomiting will not likely take place and serious collapse will follow. The writer confesses to finding little or no use for emetics in this grave disease.

When fever is high and nervous symptoms are marked, or when cyanosis suggests extreme gravity, there is nothing of so much service as the mustard bath, or better the mustard pack. It is important that stimulants be used just preceding bathing or the instituting of anything which is greatly disturbing to the patient.

The flax meal poultice is recommended by Fischer when the secretions are especially viscid.

Of much importance is the pneumonia jacket and oil silk covering.

If cough is distressing and patient strong, codine or heroin may be used guardedly, the writer having seen sodine check the urinary secretion. For diffusible stimulant and to liquify bronchial secretions there is nothing better than Ammon. Carb. Heart failure must be met by strychnine, nitroglycerine, digitalis, camphor and caffeine. The foreign authors recommend musk as the best stimulant.

A moderate cough is well for the patient and must be interfered with only as it is distressing. One thing of importance, frequently overlooked, is the changing of position in bed, even to putting the patient flat on its stomach for a few minutes. The fear of worrying the patient must not be greatly taken into account. Thoroughly aroused from the often stuporous condition, the little one will cough and dislodge plugs of mucous in a number of bronchioles and relieve an area of atelectasis giving better oxygen supply to an air-hungry, carbonic acid carrying blood.

Good digestion is of far more importance than the promiscuous use of expectorants. The inhalation of oxygen is as important as it is consistent.

In summing up the treatment of broncho pneumonia I would say, that the physician should watch eagerly for grave symptoms, combatting them vigorously as they ensue, do all possible to favor good digestion, ever keeping in mind through elimination, good hygiene and a pleasing environment.

Read before The So. Eastern Med. Association at Roswell, N. M., April 20, 1910.

SOME SURGICAL COMPLICATIONS OF TYPHOID FEVER

H. A. Ingalls, M. D., Roswell, N. M.

None of the acute infectious diseases are of more interest and importance to both the general practitioner and surgeon than typhoid fever with its many obscure symptoms and varied complications.

With the close approach of the typhoid season it is well to review the surgical phase of this disease and be prepared to meet the various surgical conditions.

It is not within the scope of this paper to discuss all the surgical conditions, but rather to consider the more frequent complications requiring prompt treatment.

Located as we are, with many suburban patients having no telephone connection, it is our duty to bear in mind the atypical and caution the family and nurse to maintain a close supervision and promptly notify us of any change from the typical course, as a few hours delay may mean the death of the patient.

The complication demanding the most prompt surgical interference is that of perforation and is usually a complication of the third week of the disease, but may occur earlier or later.

If the patient is rational, pain of a sharp, lancinating character is complained of in the right iliac region or over the hypogastrium.

On examination the abdominal muscles will be found rigid and an increase in the pulse rate and respiration noted. If seen early after the perforation, the temperature will be lower, but if later, the beginning peritonitis will have caused subsequent rise of temperature.

In patients who are delirious, the increased tenderness which causes an expression of pain, when pressure is made, together with the picture of collapse, will usually render a diagnosis possible.

In our personal series there has always been a history of vomiting in addition to the symptoms already enumerated.

It must be borne in mind that in children the symptoms, while about the same as in the adult, are much less marked and the diagnosis consequently more difficult.

Formerly much stress was placed upon the absence of liver dullness, due to gas in the peritoneal cavity, but this is no longer regarded as pathognomonic; indeed there are no symptoms of perforation. If there has been a tympanitic condition prior to the symptoms of perforation, with a normal area of liver dullness, it then becomes a valuable sign in the diagnosis of perforation.

The blood count is of no value in arriving at a diagnosis.

In considering the diagnosis of perforation, haemorrhage, appendicitis, ruptured mesenteric gland and cholecystitis must be remembered.

In haemorrhage the collapse is similar to that of perforation, but the pain, tenderness and muscular rigidity are not so marked.

In appendicitis the early collapse is absent.

In rupture of a mesenteric gland the symptoms are almost identical with that of perforating ulcer and in many cases only an incision will make the diagnosis possible. Fortunately for the patient both conditions indicate opera-

tion as the rupture of the gland is a suppurative process and peritonitis will supervene unless the cavity is opened, cleaned and drained.

In our opinion cholecystitis is present in nearly all cases of typhoid fever, but of so mild a form as not to attract the attention of the patient or attendants, but when the invasion is very acute, as sometimes seen in the second week of the disease, there may be symptoms of collapse, with pain and tenderness. The diagnosis is usually easy to make and the enlarged gall bladder can be outlined by percussion and at times a mass outlined by palpation. In case of a perforation of the hepatic flexure the diagnosis may be possible only by incision.

Intestinal fermentation will at times cause considerable pain, of an acute nature, with obliteration of liver dullness, but is not accompanied by the grave symptoms of collapse seen in those cases demanding surgical interference.

While it is true that in rare instances cases of perforation recover without operation, the only safe procedure is that of section. A three-inch incision should be made in the median line and all bleeding checked before the peritoneum is incised. As soon as the peritoneal cavity is opened, pressure over the right iliac region will cause an expulsion through the wound of serum stained with faecal matter.

The perforation is to be looked for in the last 12 inches of the ileum and in the majority of our cases the perforation has been found from two to four inches from the ileo-caecal valve.

When the perforation is found it must be handled by suture or resection. If the perforation is so large that after removal of the necrotic edges, the lumen of the gut would be too much reduced, resection is indicated.

There is no operation which demands haste more than these, so the plan of action must be quickly determined, as the chances for recovery in these cases bears a definite ratio to the length of time the patient is on the table, so if the necrotic area is extensive resection is to be advised rather than consume the time necessary for good coaptation of the ragged edges of the ulcer.

If the perforation be small the edges of the ulcer can be inverted and the wound closed by the Czerny-Lembert method.

Should there be two or more perforations, unless very small, resection, with button anastomosis, is the better plan, resecting two or more inches as the condition may demand.

In the majority of cases about 18 to 20 inches of the ileum will have a bad appearance, being mottled and the induration about the Peyer's patches can be felt. It is well in every case to examine all this portion of the bowel for thin wall, as other ulcers may be about ready to perforate. Such thin points should be protected by Lembert sutures.

In rare cases the perforation may occur in caecum or colon, the first case of our series being of this nature, the ulceration having occurred in the lymph follicles of the colon. In one of our cases where the appendix was removed a large ulcer could be palpated in the caecum. After operation we had blood showing in the stools for a number of days, probably due to manipulation of the caecum at the time of the operation. The hemorrhage was never extensive and the convalescence was about normal.

In ruptured mesenteric gland the faecal odor is not to be found in the discharge as is the case with perforation. The rupture is usually found in the primary chain of lymphatics about two inches from the bowel. The remains of the gland should be removed and the mesentery drawn together with oo cat-gut.

In both perforations and ruptures the peritoneal cavity should be thoroughly flushed with saline solution and the abdominal wound closed by means of through and through silk worm sutures, a small drain being brought from the pelvic cavity and allowed to remain for 24 hours.

In country practice the water for flushing should be strained through several thicknesses of gauze to remove the lime salts that are precipitated out of solution by boiling.

We want to urge early operation. While cases have been reported wherein recovery followed operation performed ten and twelve hours after perforation, we have never seen a recovery where operation was postponed more than six hours after the invasion of the peritoneal cavity. Whether this is due to the organization of the exudate, inclosing the infection so that its activity can continue or to the development of a toxæmia so intense the patient is unable to overcome it after the cavity is cleaned, we are not prepared to say.

Certain it is the sooner the operation after diagnosis, the greater the percentage of recoveries. This was clearly demonstrated in our last case. The patient, a young lady, was in the 24th day of the disease. Her temperature had been practically normal for three days and her physician had permitted her to sit up and allowed a soft diet. After being up for a short time she was seized with the characteristic pain and passed into a state of collapse. The family physician was with her in 15 minutes and made a diagnosis of perforating ulcer. We had the pleasure of seeing the case within 30 minutes after the diagnosis had been made and recommended section. This was accepted by the patient and family and a quick trip made to the hospital, this seeming to us a better plan than to risk the delay necessary to prepare for the work in the home.

Within two hours from the time of perforation the patient was on the table. The ilium was found much infected and two perforations discovered about two and four inches from the ilio-caecal valve.

As the condition of the patient was excellent and both perforations small, we decided to close by the Czerny-Lambert method. The cavity was flushed and the wound drained and cleaned in the usual manner.

The patient made an uninterrupted recovery and so will the great majority of all this class of cases if handled promptly.

Next in frequency we find infection of the gall bladder. The more recent work in the post mortem room demonstrates that the great majority of typhoid cases present a gall bladder infected with the bacillus typhosis.

The simple catarrhal form does not concern us, but unfortunately a certain percentage demand surgical interference for acute suppuration and gangrene.

Given a case that is starting the second week in a normal course and the patient then develops a much higher temperature, a more rapid pulse, and complains of intense pain along the right costal margin and your diagnosis is made almost without examination.

Percussion will reveal an enlarged area of dullness and if the patient will submit to manipulation a mass can be palpated.

Should the more grave form of phlegmonous inflammation be present the acute pain and tenderness will be followed by a fall in the temperature, a quickness of pulse and respiration, sweating and an anxious expression. In other words the picture of collapse. Here again prompt surgical intervention is indicated.

A three-inch incision is carried downward and inward over the ninth costal cartilage and the gall bladder exposed, after all bleeding points are secured. A small gauze pad is placed under the gall bladder to protect the peritoneal cavity in case of rupture and a traction suture passed through the serous and part of the muscular coat of the fundus and the bladder delivered and fastened extra—peritoneal by two rows of running sutures: the first row uniting the edges of the peritoneum and the serous coat of the viscus, while the second row anchors the bladder to the muscular tissue of the abdominal wall. The gauze is then removed and the dependent portion of the peritoneum closed by catgut suture and the skin, fascia and muscle, except, that over the exposed fundus, sutured with silk worm. The fundus is then entered with a small trocar and canula and the pus drained into a basin. When the excess has been removed the fundus is incised at point of puncture and a drainage tube inserted and fastened. Should gangrene be present the dead tissue should be removed, the cavity thoroughly cleaned and ample drainage provided. It has been our custom to arrange gauze in layers so the upper can be removed when soiled and fresh drainage introduced, to better protect the cavity from infection, as by this method the lower layer of gauze remains clean and allows nature to wall off the diseased area.

In an acute involvement of the appendix during this disease, the symptoms are usually typical and little trouble is experienced at arriving at a diagnosis.

As previously stated, time is the most important point for consideration when operating upon a typhoid subject, so the usual operation of amputating the appendix and burying the stump, and we believe this should be the technic in all appendectomies, is not to be practiced, but the appendix should be brought up and made extra peritoneal, by suturing the parital peritoneum around the base of the appendix and along the meso-appendix. This makes a short operation and places the patient in safety, as in case of gangrene the fatal condition, peritonitis, is avoided.

In conclusion, let us again urge early operation for if we wait for the symptoms of a well developed peritonitis our mortality will be 75 per cent or more, while with early interference our mortality should not exceed 10 per cent.

Read before the C. C. M. S., June 10th, 1909.

HOME TREATMENT VS. SANITARIUM TREATMENT OF TUBERCULOSIS.

A. G. Shortle, M. D., Albuquerque, N. M.

I have been asked by the program committee to read a paper on Home Treatment versus Sanitarium Treatment of Tuberculosis. It is not a subject that I have chosen for myself from fear of being accused of harping on what, to me is a favorite subject. However, I think it is a good subject and one that deserves considerable attention, particularly here in Albuquerque, where we are so constantly dealing with this dreaded disease.

I will first consider the positive side of this question, or why Sanitarium Treatment is the beter. To begin with: Tuberculosis is a disease for which we will all admit there is no specific, and our treatment at best is very unsatisfactory. Treatment resolves itself then into the thousand and one details incident to a proper supervision of the patients' mode of living, diet, exercise, rest, personal hygiene, etc., and further a comprehensive symptomatic treatment.

Such attention to details can only be carried out in a properly regulated sanitarium and can seldom be more than indifferently done in a home no matter how earnest, faithful, and intelligent the family may be.

To begin with, a sanitarium has the advantage of being built for the purpose, with sleeping porches, central heat, sanitary walls and floors, proper ventilation, sanitary plumbing, etc. Then in the matter of location, it should have the choice situation of the neighborhood, far enough from the city to escape its dust, smoke, and noise, and high enough to have an excellent view, for if a patient must be confined to a porch or cot, he at least likes to be as much as possible of the outside world.

Taking next, the matter of supervision, for after all it is medical supervision that is required more than medical treatment, the physician has the patient under constant observation, he sees him in the morning and at night, he has every opportunity to know each individual's idiosyncracies, weaknesses, and I am sorry to say occasionally: vices. Certainly one is better able to regulate the life of the patient under such circumstances.

Take the item of rest. I think the value of complete rest is not fully appreciated.

I have repeatedly taken cases from a home who insisted that they were observing the most complete quiet, but taking them into the sanitarium I have seen their temperatures drop from one to three degrees in a few days.

At home they had partial rest, at the sanitarium they had complete rest. I have a patient in my sanitarium at present who came to Albuquerque more than one year ago. She had a good home, and an excellent housekeeper, and everything to make conditions easy and pleasant, so that she scarcely had to raise a hand to help herself, but at the end of her first year here she was distinctly worse, she had lost weight, had a high temperature, and had acquired a tuberculous throat. Coming to my sanitarium and having complete rest, she has gained 16 pounds in three months, has gotten rid of her fever, and her throat is much improved. The improvement in the throat, of course, might be ascribed to the throat treatment, which she had not had at home.

One of the most ridiculous objections to sanitariums, is the one quite often heard that patients are likely to be depressed by their surroundings. I think that any one who ever had any personal experience will deny that, for it assuredly has quite the opposite effect. I have spent a number of years in sanitariums and I have never found them depressing or unpleasant. In fact, I know of at least two instances where patients, who were cured and back at their old vocations, returned each year to the sanitarium to spend their vacations. There are usually intelligent, bright people as patients, there is usually a good musician in the crowd, they play cards and other games, converse and walk together, and I think as a rule the time goes quite pleasantly, much more pleasantly than it would if they were forced to lie on a porch alone at home.

There is also developed an "esprit de corps" in such an institution that is quite helpful. For instance on a cold, blustery, unpleasant morning you will see one of your oldest and best trained patients come out, well bundled up and lie down on his cot on the porch and soon, one by one, like burros following their leader over a mountain, the rest of the patients emulate his good example, while you are likely to find your home patient inside by the stove, waiting for it to get warmer.

Not the least valuable part of the sanitarium treatment is that of education. The patient has been so thoroughly drilled into the sanitarium methods that soon he does them instinctively. He has acquired an education that will go far toward preventing a relapse, and he leaves with the same idea of his duty to the public. I do not believe, for instance, that you will see my patients spitting on the sidewalk.

Coming to another side of the question, it is questionable whether we should have ever reached our present knowledge of tuberculosis, particularly its treatment, were it not for the sanatoria.

The only evidence worth while regarding the value of the cure is statistical evidence, and that can hardly be compiled outside of a sanitarium. To illustrate, take tuberculosis. We can each tell of our individual successes and failures and argue it theoretically pro and con, without ever reaching any conclusion, but if an institution treats half its cases with tuberculin and the other half without, and the half receiving tuberculin show a higher percentage of cures than does the others, then we have something concrete upon which to make a rational decision. Or as in the matter of climate. Before the west and sanatoria, the value placed upon climate was purely a matter of personal opinion. But now that we have western sanatoria showing a higher percentage of cure than do like institutions in the east, it cannot be longer considered a matter for discussion. In fact the advance in the treatment of this disease starts with the establishment of Brehmer's Sanatorium at Gebersdorf, in Germany, and in this country by Hutt and later by Trudeau. Sanitarium treatment has this great advantage of advancing our knowledge of this disease.

But coming to the most important part from the patient's standpoint, the results; the sanitarium treatment certainly cures a much larger percentage than does the home treatment. I have always under my care, both classes of cases, and my results are so much better with the sanitarium cases that I have often thought of limiting my work to the sanitarium.

In Albuquerque, home treatment very often means boarding house treatment, too often in fact, and it represents the most unfavorable class of all. Of course, out of the host that come to our city every year there are many that are cured in spite of poor board, poor quarters, and practically no supervision, but there are many who die who could have been cured had they gone into a sanitarium.

Dr. Arthur Edwards told me that he never sent a case west any more unless they could afford to go to a sanitarium, and I think he is quite right. I think a patient is better off in a sanitarium in the poor climate of the east than in a boarding house in Albuquerque, and it is noteworthy that the eastern doctors who give his patient the vague advice to "go to New Mexico and you will be allright" is likely to be the loudest member of the local medical society in declaring "there is nothing in climate" and "that patients will do as well at home" after his patient has been returned home in a box.

The surgeon's percentages are unnecessarily high because people will put off an operation till there is no other hope left, and in many cases only consent to the inevitable when it is found to be too late.

We are confronted with the same condition. I often have patients look at me in surprise and say: "Why, you don't think that I am sick enough to go to a sanitarium, do you?" My answer is that anyone is sick enough to go to a sanitarium who is sick enough to show a positive diagnosis of tuberculosis.

I hope and I believe that the time is coming when the state will not only furnish sanatoria for the poorer classes, but that every one will be compelled to enter such an institution as soon as they are proved to be afflicted with tuberculosis.

It is quite as rational and desirable to isolate the tuberculous patient as it is one afflicted with smallpox.

Taking finally the other side, that of home treatment. What has it to recommend it? Well, as for myself, I feel that there is practically nothing.

There is an occasional case, usually a young girl, that suffers from separation from her parents so much that they are perhaps better off at home, but that is a rare case and as a rule the fewer relatives there are around, the better for all concerned.

Someone may urge that at least it is cheaper. That is not always the case, seldom in fact. Home treatment as a rule means that at least one person must stay with and attend to the wants of the patient, and the expense of the two is greater than that for one in the sanitarium.

A common and an annoying instance is to see a husky big husband accompanying his sick wife when she comes out here, to look after her he will assure you; though you will find him obstructing the sidewalks on the sunny-side of the down town streets most of the time. If you suggest the Sanitarium as offering much brighter chances for his wife he will say that he can not afford it, while as a matter of fact if he went home and went to work and left her in the sanitarium, they would be much better off financially.

Then when it is considered that a patient should become a cure in a much shorter time in a sanitarium, it is likely that the sanitarium treatment for most cases even the cheapest method. The special disadvantages of home treatment are briefly: lack of a building, lack of trained attendance and su-

pervision, location in an undesirable neighborhood where the air is dust and soot laden and many times lack of proper diet and last but not least, exposure to temptations. In many cases the latter consists only in staying up too late with friends, or staying indoors too long at a time, or to play cards or other games, but in other instances, it means temptations more vicious, such as drinking, gambling, etc.

And when we consider that most chronic cases appear to be constantly on the balance and a little additional help may start them on the upgrade. Then the small things do not appear so small and they may spell the difference between life and death when in the aggregate.

BOOKS REVIEWED

MEDICAL ELECTRICITY AND RONTGEN RAYS. By Sinclair Tousey, A. M. M., W. D., Consulting Surgeon to St. Bartholomew's Clinic, New York City. Octavo of 1116 pages, with 750 illustrations, 16 in colors. Philadelphia and London: W. B. Saunders Company, 1910. Cloth \$7.00 net; Half Morocco, \$8.50 net.

This work gives the practitioner just the information he wishes regarding the technic of electrotherapy and radiotherapy, the results obtained, etc. It tells him how to make a *good* skiagraph by a practical technic easily followed. It contains everything you might wish to know about these subjects. It answers all questions; it meets all needs. Everything is explained; nothing is omitted. Dr. Tousey is a leading authority in these fields, and in his book he tells how to equip your office, and, more than that, how to use your apparatus, explaining away all difficulties. He tells you just how to apply these measures in the treatment of disease. Radiography he presents in the fullest manner and gives a technic that even the inexperienced can follow with success. The completeness in details make it a valuable book for the practitioner.

THE PRINCIPLES AND PRACTICE OF MEDICINE; designed for use of practitioners and students of medicine, by William Osler, M. D., Seventh edition, thoroughly revised, New York and London, D. Appleton and Company.

Osler's work has become renown; only few practitioners are without it. The new edition is a new book. We find incorporated the new ideas about syphilis, the advances and progress of tropical diseases, the "carriers" or disease, and every new triumph of scientific medicine since the last edition.

The section on parasites has been revised and received many additions. The diseases of the stomach have been enlarged by a new section in acute dilatation of the stomach and the subject of peptic ulcer has been altered in the light of our new knowledge.

Among nervous diseases, we find now the studies of the Marie school, Oppenheimer's disease, spastic paraplegia, basic meningitis, psychasthenia and others. The serum therapy has been recognized.

The book is new—the old edition was valuable, this present is more so and forms an actual need of the practitioner.

DISEASES OF THE STOMACH AND INTESTINES. By Robert Coleman Kemp, M. D., Professor of Gastro-Intestinal Diseases, New York School of Clinical Medicine. Octavo of 766 pages, with 279 illustrations. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

It is the practitioner who first meets with these cases, and it is he upon whom the burden of diagnosis rests. After the diagnosis is established, the practitioner is able to decide the case for himself instead of transferring it to a specialist. This work is intended to equip the practitioner with this end in view. *Auto-intoxication* is very fully presented. As visceral displacements have assumed such an important position, they are specially described.

In this work the author has given in a most practical manner simple methods to save the clinician valuable time in consulting larger works. It will be found of especial use to those practitioners who have not had opportunity for a practical clinical course as photography is used to demonstrate the methods of diagnosis and treatment.

A chapter takes up the subject of Diverticulitis.

While essentially medical in scope, the book refers to surgical procedures wherever indicated.

SURGICAL AFTER TREATMENT. By L. R. G. Crandon, A. M., M. D., Assistant in Surgery at Harvard Medical School. Octavo of 803 pages, with 265 original illustrations. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

There is no subject of greater importance to the practitioner who has to do surgery, than the after-treatment of his operations. Therefore, this work must appeal especially to general practitioners in communities which are not surgical centers. The subject is treated from the stand point of individualization of each case, which is correct.

Every procedure suggested has stood the test of actual experience, and can be depended upon.

There is a chapter on Intubation as well as Electrotherapy.

The work is highly commended to all who have any thing to do with surgical treatment because it tells you how to manage all problems and emergencies of surgical convalescence from recovery-room to discharge. *All the details* are given here in this one book: it does not refer you to other works for information needed at once. The elaborate chapter on *Vaccine Therapy, Immunization by Inoculation and Specific Sera*, written by Dr. George P. Sanborn, a leading disciple of Sir A. E. Wright, is undoubtedly the most complete exposition of these subjects yet published. The original illustrations fix by the aid of the eye those points in technic less easily grasped from description alone.

Second Edition, Revised.

A TEXT-BOOK OF PATHOLOGY. By Joseph McFarland, M. D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College of Philadelphia, Second Edition. Octavo of 856 pages, with 437 illustrations,

some in colors. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

This work has been thoroughly revised. The author, as is well known, is an experienced teacher in this department of medicine, and his work has been done especially for the work of students.

Two sizes of type have been used in this publication, so that the relative importance of the text can be readily seen.

The illustrations are ample and are selected for the purpose of assisting the reader to comprehend the text.

It is a text-book of the first class, as is shown by its popularity with students.

The part treating tuberculosis is not up-to-date. McFarland overlooks the great importance of the Rosenberger theory in regard to the hematogenous origin of the disease.

McFarland has adopted the dualistic view of the bovine and human tuberculosis.

PULMONARY TUBERCULOSIS AND ITS COMPLICATIONS.

By Sherman G. Bonney, M. D., Professor of Medicine, Denver and Gross College of Medicine, Denver. Octavo of 955 pages, with 243 original illustrations, including 31 in colors and 73 X-Ray photographs, Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$7.00 net; Half Morocco, \$8.50 net.

The new edition has been thoroughly revised and enlarged.

The fundamental purpose of the author has been to analyze experience, to present in simple, concise form the results of scientific research, to form reasonably correct interpretations, and to submit practical conclusions from the view point of the clinician.

The work has been done for the benefit of the general practitioner and the student's and to these we heartily commend it.

We consider a special attraction that the part on treatment is particularly full. There are chapters on open-air treatment, diet, sanitation, and climatic treatments, alleviation of distressing symptoms, and drug and vaccine therapeutics. *The Bulletin of the Medical and Chirurgical Faculty of Maryland* says: "Dr. Bonney's book compares favorably with any volume on pulmonary tuberculosis with which we are acquainted in our own or other language." There are over two hundred original pictures, twenty of them being in colors. Of special value are the X-Ray photographs.

Among the two subjects we are pleased to see that Rosenberger's discovery and theory find the proper recognition.

PRESCRIPTION WRITING AND FORMULARY.

By John M. Swan, M. D., Associate Professor of Clinical Medicine, Medico-Chirurgical College of Philadelphia. 32mo. of 185 pages, Philadelphia and London: W. B. Saunders Company, 1910. Flexible leather, \$1.25 net.

This entirely new work contains nearly 1050 prescriptions, selected because of their proved value. Besides these, there is other information often

needed by the practitioner, such as the proper way to construct a prescription, prescription Latin, a chapter on the United States Pharmacopeia and its official preparations, tables of weights and measures, doses, incompatibility, and number of ingredients, abbreviations, and miscellaneous considerations. This book is bound in flexible leather, contains blank pages for additional formulas, and is of a size to fit the pocket. Altogether it will be found a most useful and handy volume.

DISEASES OF THE EYE—A Hand Book of Ophthalmic Practice for Students and Practitioners. By G. E. De Schweinitz, A. M., M. D. Professor of Ophthalmology in the University of Pennsylvania and Ophthalmic Surgeon to the University Hospital, Etc., with 351 illustrations and seven chromolithographic plates. Sixth edition thoroughly revised. Octavo pp. 945. Price \$5.00. Philadelphia and London: W. B. Saunders Company, 1910.

The sixth edition of this standard work has been carefully revised to date, and much new matter incorporated, including illustrations.

Throughout the text, wherever required, due reference has been made to vaccine and Serum therapy, to the relation of tuberculosis to ocular disease, and to the value of tuberculin as a diagnostic and therapeutic agent.

There have been added, amongst other subjects, chapters on the following: X-Ray Treatment of Epithelioma, Xeroderma Pigmentosum; Purulent Conjunctivitis of Young Girls; Jequiritol and equiritol Serum; X-Ray Treatment of Trachoma; Infected Marginal Ulcer; Keratitis Punctata Syphilitica; Uveitis and Its Varieties; Eye-ground Lessons of Hereditary Syphilis; Macular Atrophy of the Retina; Worth's Amblyoscope; Stovain, Atypin; Motais' Operation for Ptosis; Kuhnt-Muller's Operation for Ectropion; Haab's Method for Foreign Bodies; and Sweet's X-Ray Method of Localizing Foreign Bodies. Other chapters have been rewritten. The excellence of the illustrative feature has been maintained.

NEWS ITEMS

ALBUQUERQUE.

J. W. Colbert went to attend the A. M. A.

At a meeting of the Bernalillo Medical Society a paper was read by Dr. Reidy. Subject, "Ectopic Pregnancy." Discussion led by Dr. Kauffmann. Quiz conducted by Dr. Keck, also paper by Dr. Patchin. Subject, "Neuralgia." Discussion led by Dr. Osuna, Quiz conducted by Dr. McLandress.

ROSWELL.

Owing to hot weather, the C. C. M. S., decided to leave off one of the monthly meetings till cooler weather comes. Meetings for the past several months have been held twice per month. The meetings hereafter will be held on the second Thursday night of each month. Visiting physicians are invited to any and all meetings.

Dr. R. L. Bradley went on a trip East, taking Post Graduate work.

Since whisky was voted to go out of Roswell on July 1st, next, it is reported that two of the buildings now occupied by saloons *will have up-to-date drug stores* opened up in them.

Roswell has been having quite an epidemic of measles, but it now seems to have abated.

The last two meetings of the C. C. M. S., owing to other attractions being "on tap," were lightly attended, though interesting discussions of papers were indulged by the few who were present.

LAS VEGAS.

Dr. Mueller went on a trip to St. Louis.

Dr. Goelitz is on one month's vacation.

Dr. Kaser is the happy father of a new automobile.

Dr. Hoag opened practice in Mora.

Dr. Flint left Mora to spend a few years in post-graduate work.

The society has adjourned regular work for the summer, but special meetings are called frequently, papers read, cases discussed on the social life stimulated.

Dr. Shaw started the round by a meeting and "refreshments" at his residence, Dr. Desmarais followed next.

SILVER CITY.

Dr. Angle was thrown from his buggy while coming home from Central, a short time ago, but the injury, altho painful, was not serious. The Doctor is able to be out again and is attending the meeting of the A. M. A. at St. Louis.

Dr. Caseldine left for a trip through the territory to be gone for some time.

Dr. Hyde expects to leave for his summer vacation the first of July.

Dr. Barton is away for a short vacation to the Pacific coast.

Dr. Peters and family left for an extended Eastern trip the 3rd of June. They will visit in Michigan and Minnesota before returning. The doctor will stop at St. Louis for the meeting of the A. M. A.

Dr. Westlake has just returned from St. Louis.

ROSWELL, New Mexico, May 16th, 1910.

FRANCIS T. B. FEST, M. D.,

Editor Journal of the New Mexico Medical Society,

Dear Doctor: Some of the members of the Chaves Co., N. M., Medical Society have long been of the opinion that it would be for the good of the profession in the counties constituting Southeastern New Mexico if there should be organized a medical society including in its limits the above named territory. The subject was talked over during the late session of the Territorial Society at Roswell and there was sufficient encouragement to warrant the call of a meeting preliminary to such organization and a meeting was then held and a time set and a place selected for a meeting for organization, viz: At Artesia on October 27th, 1909.

This meeting at Artesia was a success; fifteen physicians of the district were present.

A temporary organization was effected, then a permanent one. Officers were elected to serve the ensuing year.

The Association was named "The Southeastern New Mexico Medical Association."

The officers elected are:

President—Dr. Dale Graham, of Artesia, Eddy Co.

Vice Presidents—The Presidents of the County Societies in the district.

Secretary—Dr. C. F. Beeson, of Roswell, Chaves Co.

Treasurer—Dr. S. G. VanAlman, of Clovis, Curry Co.

Board of Censors—Drs. L. H. Pate of Lake Arthur, Chaves Co.; H. F. Carr of Carlsbad, Eddy Co., and J. F. Scott of Clovis, Curry Co.

An order of exercises was adopted, and committees on arrangements and program for the next meeting appointed.

This meeting was adjourned to Roswell on April 20th, 1910.

The Roswell meeting was held on the above date and was considered a success, although not as well attended as had been hoped. Seventeen physicians were registered. An excellent program was carried out, a copy of which is enclosed.

A committee on Constitution and By-Laws, and on securing a Charter from the Territorial Society had been appointed at the first meeting.

It was decided to hold the meetings twice a year in April and October at such place in the district as shall be selected at each for the ensuing session.

The counties of Chaves, Eddy, Roosevelt and Curry were included in the district and later, Lincoln was added.

The Association affiliation is the same as that of County and Territorial Societies.

Each member of a County Society in the district is a member of this Association by virtue of County Membership.

Clovis, Curry Co., was selected as the place for holding the next session on Wednesday, October 19th, 1910.

There are 56 members of County Societies in the counties composing the district.

It is undoubtedly for the best interest of every regular physician to give his time and attention in a reasonable degree to the societies organized under the American Medical Association theory and adopted plan. There may be many objections to it, for what system is free from defects? The road to correction leads by good intention and united effort.

The writer hereof, after nearly fifty years of medical life, is convinced to a certainty that no better means exist for the making of the true and finished medical men than constant attendance on the Associations of his profession, and the loyal adherence to the regular nonsectarian system. Not otherwise can he learn to live the ethics of his calling which is that Golden Rule which will become the rule of his life, viz: "All therefore whatsoever ye would that men should do unto you even so do ye also unto them."

Constancy and loyalty to the spirit of the great composite body of regular medicine will breed within the doctor himself a spirit that will ever hark back to that golden rule which is the substance of all ethics. Constant attend-

ance on the Associations of profession is the best of all means for bringing all classes and conditions of doctors to a proper level. It smoothes down the arrogance of ignorance and the superciliousness of over-success, while it lifts up to his proper position the capable unknown in the remote location, and the diligent, but modest student held down by poverty and want of opportunity. It disperses the cobwebs of superstition, occultism and granny medication and encourages and insists upon scientific effort along normal lines.

Being educational in character these associations draw out from all the best they know and convince all that their brethren have qualities somewhere in their makeup that are useful and equal to any.

Being fraternal in their nature they develop sympathy and charity for all those in the same life work, teaching to do away with jealousy and unjust criticism, while they eliminate that spirit of unmanliness and hypocrisy that sometimes appeals to the laity in complaint of persecution and ill treatment by competitors.

Being also social in disposition these associations affiliating through county, district and territorial, the physicians throughout the whole region should become acquainted and learn to recognize merit, encourage and help where help is needed, drive out prejudice and littleness, and enable members to know each other for what they are worth and why they are worthy.

By these means the doctor's personal horizon will be broadened, his business increase his worth being made known and he will be a better physician, a better man and a more useful citizen.

M. A. BEESON.



SELECTIONS

The Importance of Standardization

The vegetable drugs used in medicine cannot always be grown under the same conditions. The soil, the season, the gathering time, the temperature—these are variable factors. Consequently, one cannot reasonably expect that the amount of medicinal substance in root, leaf, bark or seed will be constant. Two lots of digitalis leaves may look exactly alike to the experienced botanist, yet in content of active principle they may differ widely. As a matter of course, preparations of drug-plants must be variable in strength if made according to the antiquated method whose basic idea is that one kilo of crude drug will produce one liter of fluid extract. Suppose that the two lots of digitalis leaves referred to were extracted or percolated by the same operator, in the same manner, and during the same period of time. Would the products be of equal therapeutic activity? Obviously not. In each case the drug would be made to yield one liter of fluid extract, but this very fidelity to pharmacopoeial direction would carry over to the finished product the inequalities present in the crude drug.

The only way to secure uniformity in drug products is to standardize them—in other words, to adjust them to definite strength by systematic assay, chemical or physiological. This principle is now pretty well recognized by our leading pharmaceutical manufacturers. In fact, it is to one of the manufactures, in all probability, that modern medicine owes much of its scientific character. Reference is here made to Messrs. Parke, Davis & Co., who were the first to enter the fields of both chemical and physiological assay and who have practiced and preached standardization for a third of a century.

It is a healthful sign that the medical practitioner of today is giving serious thought to the subject of quality in medicinal preparations, for it is a logical assumption that the pharmaceutical market contains many therapeutic agents of very doubtful value. The physician has an obligation to himself and to his patient—an obligation which does not cease with the mere writing of a prescription. His further duty lies in assuring himself that the best quality of drugs shall be used in the compounding of that prescription. And this duty is performed through specification of the brand—a brand that he knows is reliable.

The Heart in Tuberculosis

It has been pointed out by Doctor Pottenger (Archives of Internal Medicine, October, 1910,) that a relatively low blood-pressure exists in tuberculosis, especially in advanced cases, owing to the effects of the toxins on the vasodilators, the weakness of the heart muscle and general wasting.

He declares also that myocarditis is a condition frequently encountered in advanced tuberculosis and one which, if recognized, will yield to appropriate treatment in many instances. His observations are based upon careful study of 162 cases.

Dr. Beates, of Philadelphia, expresses his firm conviction that Digalen has proved an admirable adjunct to other measures in the treatment of phthisis, because of its favorable influence upon the circulation and metabolism.

From the observations of the aforementioned practitioners it may be assumed, with reasonable certainty, that with the aid of digitalis medication relief in many cases of phthisis can be accomplished more speedily than without it.

We suggest a trial of Digalen in this direction. Its exact dosage and other qualities insure to the user all the benefits of digitalis therapy, in a comprehensive sense.

S. VANN & SON

The Central

Drug Store

Albuquerque N. M.

We have a complete new stock of Drugs—no old stuff, and no substitutes. Mail Orders solicited.

THIS SPACE

—FOR—

S A L E

Tuberculinum Purum (Endotin).

Causes no Toxic Reaction

Endotin is Koch's old tuberculin subjected to a process of purification which has eliminated the albuminous constituents. This removes the impurities (deuterioalbumoses) Which are responsible for the untoward effects that have negated the therapeutic virtues of Koch's old tuberculin. Endotin, when properly used, is free from the danger of systemic reactions (Gabilowitsch, Beumenau, Boehm, Perott, Lebedoff, Gaykowsky, and many others).

Endotin is supplied in boxes containing four series of ampoulae, enabling graduation of the dose, one box constituting a course of treatment.

PRICE PER BOX \$9.00.

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NEW YORK

The New Mexico Medical Journal

Volume V.

JULY, 1910

Number 10

EDITORIAL

NEXT MEETING

Albuquerque, September 29th, 30th and October 1st.

The scientific work has been divided into three sections and are in charge of:

Surgery—W. W. Sprague, Albuquerque.

Medicine—R. E. McBride, Las Cruces.

Specialities—C. L. Losey, Las Vegas.

The NEW MEXICO ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS tries to arrange with the section on medicine for a half day dedicated entirely to a tuberculosis program in joint session. All intending to read a paper touching tuberculosis are requested to communicate with Secretary L. S. Peters, Silver City.

Details of the program will be given in next Journal. It will facilitate the work of the gentlemen in charge of the sections greatly if each party preparing a paper, or interested in the discussion of any special topic, will notify same at the earliest convenience.

We are growing, we ought to grow more. Two days were far too short and it will take much system to do the work in three days.

The censors selected the above dates because those who desire to partake in

the lighter work of the Fair can do so to their advantage because the Albuquerque Fair opens the day after we adjourn to meet the coming year in Las Vegas as has been agreed upon informally.

Nowhere in this large country is there such a shifting population, influx of settlers and practitioners as in this new State. A perfection of our organization is very desirable. Every practitioner in New Mexico ought to belong to us. It is an honor to belong to the affiliated societies. It is a sign of good standing. Not always, but as a rule, when ever a man refuses to join, keeps himself aloft of his fellow practitioners, has no desire to improve himself with and through them, there is a nigger in the woodpile somewhere. As a rule the nigger is in the very man's heart.

The meetings of practitioners not only improve our knowledge by impressing us, more than a dead letter would, with the experiences and success of other men. We will be better fitted for our profession. Also our mutual relations will be of a different character. Friendship and social intercourse with fellow men who follow the same pursuits in life will make us take interest in their struggles, fail-

ures and success and they will share ours with them.

Our motto ought to be:

ONE FOR ALL AND ALL FOR ONE.

This is only possible when we make it so and we can do it. Organized medicine will lead to this end. The weak will become strong.

TEMPERANCE VERSUS PROHIBITION

America is a young nation. What Americans takes up shows the fire of youth. This fire leads to extremes. Intemperance is a factor of national loss, an economic detriment.

Now for several years well-meaning men, fanatics, narrow-minded preachers, professional hypocrites, wanton reformers and good citizens have attempted to legislate moral standards into human beings.

The waves of folly and fanaticism went high when a democratic republic attempted to dictate to its free citizens to regulate their private likes and habits by laconic measures. Personal liberty was restricted without education of the masses.

We always believed that father Time would convince our young nation that the present wave of absurd legislation is folly and that, at the same time, without such drastic means, the low bar-room, the breeding place of vice and crime, would be replaced by respectable localities in which the free man and woman can enjoy God's gift openly and without sights of depravity. These being our sentiments, we rejoice in the dawn of the advent of reason and quote from an exchange:

"Science knows that the evils of intemperance are due to the nature of the drink rather than to the weakness of the drinker."

"This curse of alcoholism with its open saloon, its crowded graveyards, and its mothers in tears, is out of harmony with the twentieth century and it must go."

"Law is embodied sentiment. Sentiment against alcohol must first be drilled into the convictions and habits of the people before it manifests itself in the ballot box."

"The cause of temperance will ever be a fluctuating reform until it is based on the education of the people as to the proven facts about the nature and consequent effects of alcoholic drinks upon the human system. When these facts become a part of public knowledge, dating from childhood, the saloon problem will be solved."—Mary Hancett Hunt.

While we, as physicians, know that alcohol is not detrimental in itself unless when wrongly used, that similar assimilation products are formed in the human economy by other stimulants and food considered harmless, we recommend restriction of selling places, how sold and to whom and the quality of the beverage. We, as intelligent members of the commonwealth, demand also that such means are used to enforce temperance and the only means is education of the public. Education alone will correct drunkenness and prostitution.

Medical science is misquoted by pseudo-scientists to bring about prohibition excesses. This fact warrants us to give space to these lines. At our last meeting some women demanded that the society go on record condemning the use of alcohol in any form under any circumstances and have same stricken from the pharmacopea.

Let us look at the consequences of prohibition. The income of the govern-

ment was deprived of a large tax, the expenses increased by far larger force of inspectors and the economy of the individual not improved. Far from it; the depraved demand without education lead to an increase in drunken excesses, crimes and murder. Prohibition will increase only the demand for and the production of the various "moonshine" brands.

We respect and honor the personal abstainer, we value the advocate of temperance, we consider him fit for public and other office. We recognize the right of the employer to demand abstinence under certain conditions from

their employees. We disapprove of any attempt to misquote medicine for fanaticism and it is not for lay legislation to decide whether alcohol is necessary and should be classified amongst other agents in our pharmacopea.

Education is the only keynote and education will not restrict medicine in using alcohol whenever deemed wise; no more than to condemn the surgeon's knife because knives are used for murder and suicide. Education will not force the individual to follow Christ's example set at Cana and enjoy a cup of friendship as gentleman and scholar at the right time and the right place.

WHAT MORE CAN OUR PROFESSION DO TO DECREASE THE SPREAD OF TUBERCULOSIS?

Such is the title of a valuable paper by *Jacob Glahn* of Owensboro, Kentucky. This paper is practically a repetition of what Glahn said at the International Congress on Tuberculosis in Washington. He brought out these points:

Physically, life is a chemically-active resolution.

The T. B. originates in the tubercle which is the consequence of a continuously lowered vitality due to a persistent intrinsic chemical deficiency.

There is a relation of the atmospheric air to the physical organization.

We take exception to the etologic theory about the T. B. as not in harmony with our present knowledge. We fully recognize the bio-chemical basis of life and we appreciate the deductions as to the influence of the atmospheric pressure. Glahn's practical application of his theories is of great interest to us as it gives another foundation

to the value of the climatic treatment of tuberculosis. After explaining the two-fold action of atmospheric pressure upon the human organism, mechanically by reduced density and chemically by reduced molecular consistency; Glahn says: "Therefore, if a person has a lapse from the normal or by an idiosyncrasy loses his strength and weight and becomes anemic, due primarily to a chemical deficiency, loss of the basic salts in quality and quantity, either or both, his tension becomes unequal, unbalanced, causing thereby grave disturbances in the metabolism and physiological economy of the physical organization. If a person with these symptoms then goes to a higher altitude, two, three or five thousand feet or higher a ready adjustment in tension takes place, and metabolism, and cell-reorganization is established, and the physical organization will again become normal"

SELECTED ARTICLE

The Opposition to the Owen Bill.

The Committee of One Hundred on National Health, the organ of the American Health League, in Bulletin No. 41, dated June, 1910, says:

Commercial Interests Oppose National Department of Health.

Judge Lindsey, in his famous articles on "The Beast in the Jungle," has shown how human life and child welfare are ruthlessly sacrificed to commercial interests. The same is true on a far broader scale. One cannot touch the problem of public health at any point without encountering the opposition of commercial interests. The old efforts of the merchants of San Francisco to suppress the news of bubonic plague and of the merchants in Southern States to suppress the knowledge of yellow fever, are classical instances. But those who are familiar with Health work run into such instances repeatedly. Dr. Wiley pointed out at the Congressional hearing in favor of the Owen bill for a Department of Health that a health officer cannot develop properly unless he is in an environment in which health is the main interest. It is small wonder that the commercial interests do not want an independent Department of Health. They feel safer with a Bureau of Health, located in a department devoted to commercial interests. Our principal health bureau is now located in the Department of the Treasury, which is—as it should be—more devoted to financial than to hygienic considerations. Our next important health bureau is that which dispenses the Pure Food and Drugs law in the Department of Agriculture, which is another commercial department. The

plans for transferring the health bureaus to any other of the existing departments, such as the Department of Commerce and Labor or the Department of the Interior, also have the weakness that these departments are nominated by commercial interests.

"The Beast in the Jungle."

Judge Lindsey is not the only one who has seen the "Beast in the Jungle." The advocates of the Owen bill to establish a National Department of Health have suddenly encountered in their jungle a wolf in sheep's clothing. As in Judge Lindsey's article, of the "beast" it is not visible, but instead some very respectable, but misguided, people appear on the scene as officers and sponsors for a so-called "National League for Medical Freedom."

This "League" has organized opposition to the establishment of a National Department of Health, large advertisements having recently appeared in New York, Washington, and other newspapers, although they have been taken as a joke in and out of Congress. The advertisement tries to create the impression that the movement is one of a "medical trust," attempting to control the practice of medicine. Mr. Charles W. Miller, an Iowa State representative, has been in Washington trying to bring influence to bear on Congressmen. Mr. B. O. Flower, a Christian Scientist editor, is president of the League.

They seem to have overlooked the fact that the Federal Government has no power to regulate the practice of medicine, or to restrict medical freedom, even if this were intended, which it is not.

Previous to the appearance of this

widespread and extensive advertising, Mr. Miller had been loudly stating that the movement for a Department of Health had no strength. Why, then, the need of so much effort to combat it? It is estimated that this advertisements are costing somebody \$25,000 a day. At this rate, in two or three days they spent more than the American Health League, which has been a potent factor in the movement for the establishment of a National Department of Health, has spent in the three years of existence. The same Mr. Miller has criticised the Committee of One Hundred on National Health, which forms the nucleus of the American Health League, for trying to raise a campaign fund, and for suggesting that the government should spend more money on public health. The expenditures of Mr. Miller's "League" not only exceed ours, but include three items which we have never included among our expenditures viz., for the purchase of newspaper space, for the purchase of articles and for the purchase of the services of legal representatives to appear at the Congressional hearings.

The league for "Medical Freedom" is said to consist of Christian Scientists, Osteopaths, Homeopaths, Eclectics and Anti-Vivisectionists. The advertisements state that to join the league *no fee is required*. Yet they are able to carry on an immensely expensive campaign. Are they willing to state the sources of their income? Simultaneously with the formation of the League, health writers have been approached and offered large sums of money to write against the Owen Bill for establishing a Department of Health. One writer refused what he believed was an opportunity to make two thousand dollars in this way.

Tax Payers' Leagues.

This attack on the "National League

for Medical Freedom" has such a family resemblance to various other attacks on a smaller scale, which have appeared during the last few years, that we have rummaged through our files for the sake of comparison.

Like Lindsey's "Beast," ours seem to have made its first appearance in Denver. The first among our curiosities of "medical" literature was a venomous pamphlet by a notorious quack of Denver, and purporting to represent the "Colorado Medical Liberty League, an organization numbering 1,300 enrolled members who are tax paying citizens."

This title bears a striking resemblance to the "National League for Medical Freedom" and its associated Tax Payers' leagues, which have at the same time, and within a few days of each other, been "organized" in a dozen or more states. While nominally written by a "drugless doctor," this pamphlet singles out for attack those men and magazines, such as *Collier's* and the *Ladies' Home Journal*, that have fought quackery and the patent medicine evil, and have championed the Pure Food Law.

The following quotations show its animus against pure foods and drugs:

"Question. What is the attitude of the Committee of One Hundred in regard to the adulteration of food stuffs and the substitution of drugs as commonly practiced by many commercial concerns?

Answer. It is against all concerns that do not give the finance committee a rake-off.

Question. What is the attitude of the Committee of One Hundred towards injurious patent medicines?

Answer. It is dead set against all patents which do not contribute to the trust's pocket.

Question. Do any members of the

Committee of One Hundred receive salaries or other remuneration?

Answer. Nay, nay, that would spoil our game. They will be taken care of later.

Question. How can additional information, including printed matter issued by the Committee of One Hundred be obtained?

Answer. In car lots or less, F. O. B., New Haven, Conn.

Question. What are the publications and pamphlets now or formerly distributed by the Committee of One Hundred?

Answer. They are too numerous to mention—mostly devoted to “exposing” quacks. A quack is any one who is not orthodox according to the dictum of the medical trust.

Question. Why must an organization of citizens be formed to protect the public health?

Answer. Because that is the only way we can fool the suckers into continuing to take patent medicines only as doctor's prescriptions.

This pamphlet refers to the American Medical Association as a “Trust,” and composed of “old school fanatics,” take sides with Eclectics, Osteopaths, Spiritual Healers, etc., and ends with the following statement: “If the public does not want to be bulldozed by the medical trust, it will at once file its protest against a national bureau of medicine by writing individual letters to Congressmen, promising to vote out of office all who vote for such a bureau.”

In his speech before the Senate, May 25th, Senator Owen said:

“I am informed that the sudden and surprising interest of the “taxpayers and voters’ of the United States who are organized in this artificial manner and the active interest alleged or manifested of the ‘homeopaths’ and of the ‘Osteopaths’ and of the ‘Eclectics’ and

of the great variety of those who have special views with regard to the various methods of healing the sick has taken place within seven days, and like a flash of lightning telegrams are coming in from Maine to California. The chairman of the Committee on Public Health and National Quarantine of the Senate received a very large number of them. Such sudden universality of disapproval of the department of public health on such an unsound theory is astounding; it is more, it is extremely suspicious; it is obviously artificial; it is perfectly apparent that somebody is spending a very large amount of money on this sudden propaganda; it can hardly be doubted that somebody, in gross error, is advising the ‘homeopaths,’ the ‘osteopaths,’ the ‘eclectic’ that their right to practice medicine is about to be invaded by the Federal Government.”

The Nature of Our Opposition.

Another pamphlet is entitled “The Political Doctors’ Slick Little Joke,—On Congress, on the States, the Pure Food and Drugs act, and the People.” The writer attempted to establish the thesis that the Committee of One Hundred is the tool of the American Medical Association and of the Catholic Church. He quotes scripture to prove this. He distributed a sizeable booklet entitled “Roosevelt Steam Rolled by the Bible.” He shows that the Committee of One Hundred on National Health was prophesied in the Bible and that the “Medical arm of papacy is really the pivot upon which the old earth of error is to swing into the new heaven and new earth of revelation.” In a letter of reference to his book he says, “You may be surprised to know that Taft can be identified in the Bible in more places than the place indicated in my book—the other places are not yet made public. The subjects of the science

of medicine and philosophy are to be confronted by the substitutes of the Bible."

The author of these curious aberrations of mind adds in a postscript, "I want to say if you have any intention of getting me committed to the Government Hospital for Insane, you will be foiled."

This insane literature seems of a piece with the literature of the "National League for Medical Freedom." But now these people seem to have found a barrel of money with which they are "moulding" public opinion. It is easy to understand how quacks and nostrum venders may object to the National Pure Food Law which they are seeking by every means to undo; but it is said to see reputable and earnest men unwittingly made tools of, and still sadder to see other reputable men sell their services as paid attorneys, and to see writers—unconsciously though it be—prostitute their abilities in the interest of these campfires who feed upon illness and prey upon the public health.

"License They Mean, When Liberty They Cry."

The New York Times, which made the mistake on May 17th of printing the advertisement of the "League for Medical Freedom," corrected it on the 18th by the following strong editorial:

"Medical Freedom."

"Makers of patent medicines, adulterators of drugs, and practitioners of the cults of mental and osteopathic healing are up in arms. They have persuaded a few well-intentioned, but misled individuals, to join them, and have formed the "National League for Medical freedom" to oppose the efforts of practically all the reputable physicians in the country to consolidate the agencies of public health at Washington in-

to one efficient department or bureau.

"These efforts have been waxing stronger. The men of the American Medical Association and the Committee of One Hundred on National Health, sanctioned by the Association for the Advancement of Science and headed by Prof. Irving Fisher of Yale, have won the approval of the entire press of the United States in urging the passage of their bill. In the various departments and bureaus of the Federal Government are lodged powers that cannot be wielded effectively until they shall be co-ordinated under one head. Once united, they can be used in a great propaganda for educating the people against the habit of self-dosage and a resort to quack medicines for their ailments. By a campaign of prevention the bureau would break the prevalence of epidemics and infections between the states. It would work for the passage of laws that would guard the channels of Interstate Commerce against the admission of adulterated drugs, and for the establishment of standards of purity and strength that would be copied by the States of the Nation.

"The self-styled 'League for Medical Freedom,' quotes Prof. Fisher accusingly as having said that the Government might soon be appropriating millions yearly for the conduct of this bureau. If it should appropriate a million for every hundred thousand it now appropriates for the protection of the health of hogs and cattle in the United States, Prof. Fisher's prophecy would be fulfilled, and no one would have cause for complaint but these friends of "freedom." Their cry is an old one and well understood.

" 'License they mean, when liberty they cry.' "

Where Do the Funds Come From?

The opinion expressed in this editorial is general. It is fair to say that the

well-intended leaders in this League for "Medical Freedom" doubtless do not realize the situation in which they are placed. They may be correct in their denial that their "League" is being financed by patent medicine interests, but they have not yet disclosed specifically the sources of their funds. Requests so to do have thus far been unanswered. From appearances they have spent more in one day than our Committee has spent in a whole year.

Whatever the source of their funds there can be no doubt that a virtual alliance exists between this league and the purveyors of patent medicines and the opponents of the pure food law.

On the advisory board of the new league is the editor of the organ of the National Association of Retail Druggists, controlled by the members of "The American Drug Syndicate" or the "Drug Trust," which has been so hand-in-glove with the quack medicine interests that many hundreds of its members resigned last fall in protest.

A congressman, on looking up the occupations of the signers of telegrams against the Owen Bill, found a liberal sprinkling of patent medicine proprietors and vendors.

In this unholy and anomalous alliance between "Christian Scientists" and quack medicines are included the services of some newspapers that rely for revenue on quack advertising. (See our bulletin on "A Century's Criminal Alliance Between Quacks and Some Newspapers," by C. S. Andrews.)

Coincidences.

It may be a coincidence, but simultaneously with the appearance of this "league" in Washington, the same lobbyists who had fought the Pure Food Law, also appeared, although not publicly. It may also be a coincidence that at about the same time a certain noted writer on health was offered a large

sum of money to write articles to "kill the Owen Bill." Those who approached him for this purpose reluctantly admitted, after first alleging that they represented Christian Scientists, etc., that the patent medicine interests were also behind them.

It may also be a coincidence that one of these afterwards acted as agent to place the advertisement of the "League for Medical Freedom."

It may also be a coincidence that this vigorous effort to prevent the creation of a Department of Health began immediately after the issue by the Department of Agriculture by Dr. Keber against nostrums, in which—for the first time in history—the names of the "remedies" to be avoided were printed. It would not be strange if the firms that were thus hit hard by the Department of Agriculture should not want to be hit harder, as they might be and ought to be, by a Department of Health.

It may be a coincidence that at this same time a newspaper now actively opposing a National Department of Health, sent a reporter to one of the officers of the Committee of One Hundred to inquire what the Committee expected the new Department to do, and whether, perchance, the Committee knew of the nostrum report just made.

It may also be a coincidence that a chemist, interested in food adulteration, came at almost the same time to ask almost the same question.

Misconstruction of Facts to Mislead Readers.

The eagerness of those who construct these advertisements to mislead is illustrated in many ways. For instance, they have utilized a misprint in the report of one of the hearings as follows:

"Question. What is the Committee of One Hundred?"

Answer. One of its members, Hiram, Messenger, when asked this question by Senator Crawford of South Dakota, (Senate Hearing Owen Bill, Page 30), stated: "The Committee of One Hundred is a committee that was appointed by the American Medical Association for the advancement of science."

The word "medical" was obviously a slip of the tongue or of the pen. No one ever pretended before that there was any connection between the American Medical Association and the American Association for the advancement of Science.

Medical Cults.

The "League for Medical Freedom" does not seem to really represent the leading members of the Schools of Medicine they claim to represent. The foremost members of these various cults have openly favored the Owen Bill. Dr. J. B. Gregg Custis, a Homeopath, chairman of the Board of Medical Examiners of the District of Columbia and ex-President of the American Institute of Homeopathy as well as of the International Congress of Homeopathy. Mr. George H. Shipley, a prominent lawyer of Washington, whose wife is an Osteopath practitioner and who is himself the attorney of this system of healing before committees of Congress, favored the bill and among other things said:

"As a citizen and a lawyer, I am deeply interested in the establishment of a National Health Department. Possibly I can help to dispel some of the fears of those who, in other ways, have come into conflict with the American Medical Association.

"There is no possible way whereby any medical sect can secure National Health regulations that will interfere with the State's control of the licensing of the competing schools of healing. It

follows that the Osteopathic physicians, the Homeopathic physicians and the Eclectic physicians are in no danger from a National Health Department."

Real Purpose of Department of Health.

A Department of Health has really nothing to do with the medical art, It is really for the purpose of preventing diseases by preventing the pollution of streams, by preventing the adulteration of foods, by preventing the importation of bubonic plague and yellow fever, by investigating health conditions and disseminating information. It has been proven that there are over half a million deaths yearly in this country. The Owen Bill, if passed, would ultimately prevent a large proportion of these.

From Owen's Senate Speech.

"As the author of this bill I wish to say that I believe the more a man knows about the laws of health the less drugs he takes. I have employed Homeopaths and Osteopaths and Allopaths as well to treat myself and the members of my family. I have studied the doctrine of suggestive therapeutics and of Christian Science with great interest and respect, and I cordially endorse Horace Fletcher as the best doctor of them all. I stand firmly for medical freedom and for the right of the citizen to select his own medical or spiritual adviser."

Those Who Want a Department of Health.

The principle of the Owen Bill, establishing a Department of Health, has been endorsed by the President of the United States, by the Surgeon-Generals of the Army, of the Navy, and of the Public Health and Marine Hospital Service, by Dr. H. W. Wiley of the Bureau of Chemistry, by the Governors

of States, by the Conference of State and Territorial Boards of Health, by the American Medical Association, by the American Public Health Association, by the United Mine Workers of America, by the National Grange, by the Republican and Democratic platforms, and by numerous other organizations.

Life insurance companies, who advocate this bill, certainly have no desire to limit medical freedom and repress any system which offers the chance of lengthening human life. They have no medical partisanship, and their sole interest is to lengthen life by whatever means possible. Their actuaries state specifically that they believe human life could and would be lengthened by the establishment of a Health Department.

General Wyman Favors Department.

At the May 19th hearing on the Owen Bill, General Walter Wyman, Surgeon-General of the Public Health and Marine Hospital Service, came out strongly and firmly in favor of establishing a National Department of Health. General Wyman has hitherto been non-committal, and the opinion had been entertained generally that he was opposed to the measure.

The "Medical Trust."

The American Medical Association has trod on many toes in its efforts to get state legislation enacted. It is natural that enemies thus made should strike back. But in attacking national legislation they are "barking up the wrong tree." Moreover, a great injustice is being done the American Medical Association. It is not a "trust." No one will deny that it includes in its membership the best and ablest men in the profession. It has tended to liberalize rather than to narrow medical ethics and practice. While it has aimed at restrictions, the object has been to prevent the

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vicious and harmful quack and charlatan from plying his nefarious trade. Naturally it is not infallible, and has doubtless made mistakes, but the present attack upon it will be resented by the large public who appreciate the work of the medical profession, as well as by those who believe in fair play.

First Three Hearings.

A full account of the first three hearings, (April 29, a. m.; April 29, p. m., and May 5 a. m., on the Owen Senate Bill, (S. 6049), for establishing a National Department of Health has been published by the Government in a pamphlet of 130 pages which can be obtained free of charge, by addressing *The Document Room of the United States Senate*. This document gives the statements made by:

Joseph Y. Porter, President of the Conference of State Boards of Health, and State Health Officer of Florida.

Dr. Charles A. L. Reed, Chairman of the Legislative Committee of the American Medical Association.

Lee K. Frankel, representing the Industrial Department of the Metropolitan Life Insurance Company.

Robert Lynn Cox, Counsel of the Association of Life Insurance Presidents.

Dr. William H. Welch, President of The American Medical Association.

Dr. Franklin C. Wells, Medical Director of the Equitable Life Assurance Society.

Hirman I. Messenger, Actuary, Travelers Insurance Company.

Professor Irving Fisher, President of the Committee of One Hundred.

Hon. George Shiras, 3d, Chairman Legislative Sub-Committee of the Committee of One Hundred on National Health.

Brigadier-General T. Torney, Surgeon-General, United States Army.

Rear-Admiral Charles F. Stokes.

Surgeon-General United States Navy.

William J. Schieffelin, representing the National Wholesale Druggists' Association.

Dr. Wisner R. Townsend, Treasurer of the American Medical Association.

Dr. Luther H. Gulick, Director of the Department of Child Hygiene of the Russell Sage Foundation.

Dr. George M. Kober, Dean of the Medical Department, Georgetown University.

Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry, Department of Agriculture.

Dr. Thomas Darlington, ex-President of the Board of Health, New York City.

Professor W. L. Willcox, Expert Adviser for the Twelfth Census.

Dr. J. N. McCormack, representing the Kentucky Board of Health.

Dr. Cressey L. Wilbur, Chief Statistician of Vital Statistics of the Census.

Dr. Frank Billings, Dean Rush Medical College.

Dr. Woods Hutchinson, Professor of Clinical Medicine, New York Polyclinic.

Of the foregoing twenty-two speakers, thirteen are members of the Committee of One Hundred on National Health. All of these speakers appeared in favor of the Owen Bill.

There were no speakers in opposition. But the strong support and popularity of the movement which these hearings revealed seemed to terrify the opponents of the bill, who proceeded to organize the "League For Medical Freedom."

May 19 Hearing.

At the hearing, May 19 (a. m.), which has also been officially reported, the speakers who appeared in favor of the bill were:

Gen. George H. Sternberg, Surgeon-General of the Army, retired.

Prof. Robert S. Woodward, President Carnegie Institute.

Dr. J. B. Gregg Custis, Homeopathic physician, Chairman of the District Board of Medical Examiners, of the District of Columbia.

Dr. John S. Fulton, Secretary-General of the International Congress on Hygiene and Demography.

Gen. Walter Wyman, Surgeon-General of the Public Health and Marine Hospital Service.

Dr. Cressey L. Wilbur—continued from previous meeting.

Mr. Arthur E. Holder, representing the American Federation of Labor.

Mr. George H. Shibley, a prominent lawyer of Washington, favoring Osteopathy.

A number of letters favoring a Health Bureau or Department, were presented from Governors of Southern and other States; also planks favoring such legislation adopted by the Republican National Platform, the Democratic National Platform, and the Independence League. Resolutions favoring such legislation were presented from the Ohio State Legislature. Extracts from the messages of President Taft and former President Roosevelt, favoring such legislation were presented; also resolutions of the American Federation of Labor, United Mine Workers of America, National Grange, New York Grange, and other Granges, the Farmers' Educational and Co-operative Union of America, the American Society of Equity, and numerous scientific and medical societies.

A letter was presented from Dr. Porter, the (Homeopathic) health officer of New York, favoring a National Department of Health.

In the evening the opponents were heard.

Ex-Governor John L. Bates, attorney

for the "National League for Medical Freedom."

Harry E. King, "Ohio Civic League."

Robert M'Carter, representing the National Osteopathic Association.

Henry R. Strong, proprietor National Druggist and Medical Brief.

O. H. Hoss, "Missouri Voters' and Taxpayers' League."

John M. Reed, "Voters' and Taxpayers' League of Iowa."

F. A. Banks, "Voters' and Tax-Payers' Association."

W. R. McCaul, "Voters' and Tax-Payers' Association of Wisconsin."

L. H. Collins, "National League for Medical Freedom."

Clifford Grieve, "National Association for Suggestive Therapeutics, and the Weltman Institute of Suggestive Therapeutics."

Hyland C. Kirk.

Latest Hearing.

The latest hearings on the six health bills now before Congress—or rather on the five that are now before the House of Representatives—was held before the House Committee on Interstate and Foreign Commerce from June 2nd to June 6th inclusive. Among the speakers for the Hanna and Creager Bills, which are the same as the Owen bill in the Senate, were:

Dr. George M. Kober, Dean of the Medical School of Georgetown University.

Dr. Woodward, Health Officer of the District of Columbia.

Ex-Surgeon-General Sternberg.

Admiral Stokes, Surgeon-General of the Navy.

Mr. Hendricks, the noted sanitary engineer of Baltimore.

Mr. Hiram J. Messenger, Actuary of the Travelers' Life Insurance Company.

Miss Mabel Boardman, Head of the National Red Cross.

Professor Irving Fisher, President of the Committee of One Hundred.

Hon. George Shiras, 3d, Chairman of the Legislative Committee of the Committee of One Hundred on National Health.

Dr. J. H. Kellogg, of the Battle Creek Sanitarium.

Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry.

Dr. Cressey L. Wilbur, Chief Statistician of Vital Statistics of the Census.

Major Owen, brother of Senator Owen.

Against the bills appeared, as the attorney of the "National League for Medical Freedom," Mr. John L. Bates, former Governor of Massachusetts, and other attorneys and representatives.

Several members of the Committee on Interstate and Foreign Commerce stated that this opposition had no influence with Congress. On the other hand, the outlook is not favorable for the passage of the Owen, Hanna or Creager Bills during this session.

American Health League Members Should Help.

It is important that every member of the American Health League should know that the fight is on. Against us are arrayed the leagues of "Freedom," the quack medicine interests, the newspapers allied (by advertising) therewith, and the able attorneys and editors they employ. On our side are President Taft, Ex-President Roosevelt, political party platforms, medical, hygienic, scientific, educational, philanthropic, insurance, labor and Grange organizations. While intrinsically we have infinitely the stronger side, our enemies have the great advantage of money. The situation is as serious as in the

political campaign in which the forces of evil and money so often triumph. It is another case of the People against the Special Interests. Each loyal member of our League, and each loyal citizen who reads these lines, should

do his part, namely, contribute, if possible, to the expenses of conducting this campaign for establishing a National Department of Health, and write to Congressmen urging their favorable consideration of the Owen Bill

ORIGINAL CONTRIBUTIONS

MYXOMATOUS DEGENERATION OF THE CHORIONIC VILLI.

Troy C. Sexton, M. D., Las Cruces, N

Definition. This condition is a cystic formation of the ends of the chorionic villi, and gives the appearance of a bunch of grapes.

Anatomy. In order to get a more comprehensive, as well as a minute knowledge of this condition, it might be well to look into embryology and the histology of the chorion, and familiarize ourselves with its growth and development. It is one of the membranes of fetal origin, and lies against the maternal, or decidual membrane.

Each time, just previous to the menstrual cycle, the uterine mucous membrane undergoes a congestion, and consequently a swollen condition; a preparation for the fertilized ovum. If this fertilized ovum does not appear, menstruation occurs, and relieves this congested and swollen condition, until the next cycle is due. If the ovum becomes fertilized and remains in the genital tract, the uterine mucosa undergoes further change, forming the decidua. It increases in size and thickness, and sometimes becoming as thick as 7-8 of an inch; and also in vascularity. Its surface is soft and velvety, undulating and wavy, and filled with depressions. It is now ready for the fertilized ovum, which upon entering the uterine cavity, adheres to some point of this decidua. The outer coat or membrane

of the ovum is the chorion which is described by Minot as the "whole of that portion of the extra-embryonic somatopleure which is not concerned in the formation of the amnion."

At its entry, the ovum has a chorion with a mesodermic lining, and villi. These villi are solid outgrowths of the epithelial layer, which show small cavities at their bases, and the mesoderm protrudes into these. These villi extend or grow into the decidua, and derives the oval nourishment therefrom. This process of growth into the decidua is such as to impress one that there has been a disintegration of the decidual epithelium, its glands, and its blood vessel walls, and that they have not merely been pushed aside. These then having grown into the mucosa, or the decidua, dip into the maternal blood.

Later in the development, the villi are grouped into a band around the ovum, and leaving two poles with bare places, or of very minutely developed ones, till later the villi becomes hollow, with two distinct epithelial layers, which are very soon penetrated by blood vessels which have developed in the mesodermic layer of the chorion. All this time the entire chorion has been studded with villi, except in the polar areas. But now the clubbed villi over the decidua reflexa begin to atrophy

and to degenerate, the surface becoming smooth. The villi over the decidua serotina,—or the portion of the decidua where the ovum originally or primarily adhered,—begin to enlarge or hypertrophy and to throw out complex branches. The blood vessels of the ovum follow up these branches of the villi and in this way the fetal portion of the placenta is formed. At this time the outer layer of the epithelium of the villi undergo a further change. These rapidly developing cells do not entirely cleave, but form a large single cell with many nuclei, which is called the syncytium. This of course has a destructive effect upon the uterine mucosa, and of the vessels. This is a fetal structure, and is the membrane separating the maternal from the fetal blood.

Frequency. Madam Boivin of Paris, reports one case in 20,000. Edgar has seen four cases in 15,000.

It is usually seen in the first few months of gestation, and seldom after the fourth. If it occurs in the first four weeks of gestation, the fetal death follows immediately, and occasionally with complete disappearance of the fetus. If the development is later, and about the second or third month, the fetus may die, but will not disappear or be absorbed, because a good portion of the membrane and placenta, are not extensively involved, making absorption at this late period rare.

The condition is oftenest found in multiparae and from the age of 25 to 40 years. It is far more common in the latter part of the sexual life of the woman, some authorities claiming that 22 per cent of cases are seen in the fourth and fifth decennia.

There are cases reported where there have been repeated occurrences in the same patient. Mayer reports that in 11 pregnancies, that is occurred in every one.

Pathology. This is one of the few diseases of the chorion, and the one that we are the most familiar with, as well as one of the most important. For a long time it was thought to be a true hydatid condition, because it presented to a great extent, the picture of the hydatid, having the vesicles which were arranged in the characteristic way, and similar to the true ones seen in the liver and in the other tissues. However, this has been disproven for some time, and this belief no longer obtains. It is now positively known to be a diseased condition of the villi of the chorionic membrane. The condition is characterized by the presence in the uterine cavity of a number of these translucent vesicles, containing a fluid of a limpid nature and resembling upon analysis, the amniotic fluid. Upon gross analysis, we find that these vesicles range in size from that of a millet seed to that of an acorn or walnut, and having the appearance of a bunch of grapes. On a more minute examination we find that these vesicles are not all attached to individual pedicles, but some are attached in this manner, others attached to these, and we even find some of the pedicles partially distended with fluid.

Getting into the histological pathology, we find the condition beginning in different stages of the development of the chorion, and of the placenta. It usually begins in the early development of the villi of the chorion. When it begins early in this manner, usually the entire surface of the membrane becomes involved. But when the disease begins later in the development of the chorion, and about the time that the placenta is developed and the villi over the general surface has disappeared and atrophied, the disease is then restricted to that portion where we find remaining villi, or in other words, in the placental tissue, and the rest of the surface of the chorion is unaffected.

In the vesicle formation, the deeper layer of cells disappear, and the plasmodial layer remains in tact. This is very noticeable in the vesicles of large size. The proliferative changes appear to be that of young placental tissue. The seat of the disease seems to be in the connective tissue stroma.

The earliest changes that are seen are, those in the normal spaces in the tissues. They are noticed to be distended with fluid. There too, is often seen in these spaces single large cells which have globular nuclei. Gradually these become more and more distended, and the connective tissue framework disappears entirely, and leaves, the larger vesicles no more than hollow globules filled with a fluid: all structural wall formation having been destroyed, except the remaining epithelial wall of the villus. Thus we have these grape like bodies formed, and the different sizes are only the different stages of formation.

The disease process having once started we find a remarkable power of reproduction in all of the diseased tissue, and it goes on so rapidly that a mass as large as the head of a child is soon formed.

The decidua too is usually diseased along with this process, and shows hypertrophic changes. The chorion gets its nourishment from or through this decidua though, and it might be a compensatory hypertrophy.

Occasionally we find adhesions very firm to the uterine wall, and these make the expulsion of the growth very difficult. In a few rare cases the villi have forced their way right into the uterine wall, and even into the sinuses, and this causes an atrophy and thinning of the uterine musculature. This condition of course adds to the gravity of the case. Such cases have been reported by Volkman, Waldeyer, and Barnes. There are three cases reported where

the villi grew so rapidly, as to penetrate the uterine wall to the peritoneum. This rendered the successful expulsion or removal of the uterine contents, without having severe or fatal hemorrhage or a septic peritonitis from infection through the uterine perforation, impossible.

The villi undergo hypertrophy, and a myxomatous degeneration which begins in the tips of the villi.

The syncytium plays an important part in this condition. It is this tissue that seems to give the first impulse to the changes in the villi. Large masses of this tissue, and of the chorion, protrude or grow right into the uterine walls, in the same manner that a growth of a malignant character would.

In the development of the mass, there is a proloferation of the epithelium, the connective tissue, and of the vessels along with these tissues. However the arteries of the degenerated villi become obliterated and the decidua destroyed.

Virchow believed that an endometritis predisposed to this condition.

Etiology. This divison of the study has brought about much discussion. Some suppose that it, as a disease, always follows the death of the fetus, and contend that the whole energy of development is exerted upon the chorionic villi which remains adherent to the decidua, which gives it nourishment. Thus accounting for the abnormal growth, and of its cystic nature. This theory has been the one most credited, because the fetus is seldom found along with the condition, and because in a few cases where it has existed with a twin pregnancy, one chorion is found degenerated and the other healthy at term. Then others claim that it has its origin in the tissues of the mother, even Virchow thought that it had its origin in the decidua. Still others claim it to be a blood dyscrasia

of the mother, such as syphilis or carcinoma. Many reasons exist to support this theory, such as being found in one case or patient, in repeated instances and because, though rare, there are similar alterations found in the placentas and membranes of living children. This theory, of course, places the death of the fetus as secondary, and due to the alteration of the nutrition brought about by the diseased process of the decidua and chorion.

Both of these views probably are correct. In the one the embryonic death being the primary cause, and in the other that it is the secondary one, and that the maternal cause or source of the disease is obscure.

There are other things assigned as being instrumental in the formation of the growth. These are uterine fibroids, cancer, a pre-existing metritis chronic deciduitis, absence or a deficiency of allantoic vessels, fetal syphilis.

There is another view that the condition has been dependent on conception, because of the fact that in some cases the villi grow into the tissues of the uterus producing an atrophy and thinning of its walls. To contend on the other hand that it is independent of pregnancy would be absurd. But it might be possible that true entozoa might form in the uterine walls, and when expelled through the vagina, be taken for this disease, and give rise to a suspicion as to the chastity of the patient. One case has been reported by Hewitt, in an unmarried patient, where true hydatids originated in the liver and extended into the peritoneal cavity, and was about to rupture into the vagina at the time of death. Too, there are one or two cases of true hydatids of the uterus reported. And Hewitt reports a case of acephalocyst that was expelled from a uterus and the patient recovered.

Medico-Legal. Melelintoock says—

"Hydatids may be retained in utero for months or years, or a portion only may be expelled, and the residue may throw out a fresh crop of vesicles, to be discharged on a future occasion." These may be passed long after impregnation, and mistakes might be made in a widow, or in a woman living apart from her husband. Therefore it is possible for an unfounded suspicion of a patient's chastity, in one who has passed a cystic mass.

All cysts should be carefully examined as well as the contents, in order to prove their true character. The echinococcus heads, and the characteristic hooklets can be determined and recognized with the microscope.

Symptoms. The symptoms are by no means well marked. There is nothing at first to direct your attention to the condition. As pregnancy progresses there is an alteration in its usual or normal course, in some cases. There is in some, a general disturbance in the usual health; the reflex irritations are increased, such as vomiting, nausea, faintness, and even syncope, and possibly extreme exhaustion. These conditions are due to an abnormal enlargement. Besides there are a train of symptoms said to be due to the growth of the villi into the uterine tissues. These are, abdominal, lumbar, and sacral, pains. As the villi grow more into the decidua, there is an increase in the amount of hemorrhage. Occasionally there is renal insufficiency, and albuminuria.

The first physical sign that might attract our attention to the malady, is the rapid development of the intro-uterine tumor, and coincidently the corresponding rapid enlargement of the abdomen, this being out of relation with the calculated period of gestation. In the third month, the uterus may reach as high as the umbilicus, or even beyond. Then about this time, we have a

watery or a serosanguinous discharge resembling currant juice, which is due to the painless uterine contractions breaking down the vesicles. This condition occasionally becomes extreme, and weakens down the patient. Vaginal examination yields nothing before the os is thoroughly dilated. There is the absence of ballotment. Leischman considers that "a peculiar doughy, boggy feeling" associated with a hard uterus, is a very important symptom.

Occasionally there are thrown off one or more of these cysts separately, and the discovery of these, are the only positive signs that we have of the true condition before us.

To sum up then the general symptoms, we have

1. An abnormally rapid increase in the abdomen—
2. Antepartem hemorrhage—
3. Expulsion of the vesicles from the uterus and vagina.

Prognosis. The life of the fetus is usually lost, and in most cases is destroyed in toto. In the reported cases the maternal mortality is about 13 per cent, and death is due to hemorrhage, septic infection, uterine perforation and general septic peritonitis.

About the fourth or the fifth month the uterine cavity is emptied naturally. This is induced by the presence of the abnormally large, and unusual growth producing a rapidly distending viscus and the irritation to this origin produced by the growth into its walls of the villi.

Treatment. The diagnosis having been made before nature has come to the assistance of the patient, an immediate evacuation of the uterus is demanded. It is very important to evacuate the viscus, because it reduces to a minimum the chances of a penetration, and possibly a perforation of the uterine wall, which inflicts great damage to

it, by reducing the time in which it may develop.

Ergot may be used with advantage, to bring on contractions, and to hasten the emptying of the organ. In case this does not act as desired, the cervix should be dilated, so that one finger, or the whole hand may be introduced, to remove the growth if necessary, to prevent as much loss of blood as possible. It must be remembered though, in resorting to this measure, that in many cases the uterine wall has been weakened and thinned by the mass having grown into it, and too much force or energy is not to be brought into use, for fear of producing a tear, or a perforation. If necessary the use of a dull curette may be used, but only with great care. This having been done, and any severe hemorrhage results, this may be controlled by swabbing out the cavity with a solution of perchloride of iron. The uterine cavity should be thoroughly cleansed with an antiseptic douche, in case of manual introduction, or a curettage has to be done.

Shock should be met in the usual way, and an infusion be resorted to in case there is a great loss of blood, if time remains in which it might be done.

If there is a uterine perforation or a tear, it will be necessary to repair it through an abdominal incision, provided the patient's condition will permit of the ordeal, and the urgency of this procedure depends upon the presence and amount of hemorrhage, and also of the amount of shock existing at the time.

Biography. Science and Practice of Midwifery.—Playfair.

The Practice of Obstetrics.—Edgar.

The American Text Book of Obstetrics.

Reference Handbook of the Medical Science.

Mrs. M. P. (Mexican.) Age 21 years. Married. Resides in Vado, N.

M. Family history is unknown, except that the mother of the patient recently died, and of some malignant condition, presumably.

Previous history is negative, except that the patient has been pregnant once before, passing through it successfully, and delivering a healthy child, which is still living.

I first saw the patient in my office December 9th, 1908. She told me at the time that she was about two and a half months pregnant, and that she wished to consult me because she was losing blood per vaginam, but that she was not having any pains. One or two days before, she had driven from Vodo to Las Cruces in a buggy. Before leaving Vodo, she had had no losing whatever, and had only noticed it after arriving here.

I requested her to go to her sister's house and to go to bed at once, and to remain there till all the flowing had ceased for several days. At the same time ordering the usual doses of Hayden's Viburnum Compound, and Decolorized Tincture of Opium every three hours. Light diet, and to remain quiet in bed. The sister reported to me on the second day afterwards, that the patient had ceased to lose so long as she remained in bed, but that it began again as soon as she attempted to walk around or even to sit up. She was put back to bed, and it again ceased for two days, but on December the 13th, along in the night the hemorrhage began again, but this time while she was in bed. It was intermittent, but in larger quantities than it had previously been. The sister reported the condition to me in the afternoon of the following day, and I went out to see her about 8 o'clock on the evening of the 13th., and while there I made a vaginal examination. She had some fever which was about 103, and the pulse was very accelerated, constipation was present,

with some nausea. There had been no hemorrhage for several hours then, but the last few of them, were accompanied by some slight painful contractions of the uterus.

On vaginal examination I found the cervix hard and firm, but with sufficient dilatation to enable the introduction of the examining index finger whereupon I examined the entire lower segment of the uterine cavity. Nothing whatever could be felt, or discovered. The uterus was enlarged to the size of a large cocoanut, and not as globular as it should have been had it contained a fetus and its membranes, but it was flattened superior-inferiorly. No membrane, fetus, or placenta was palpated.

About 11 o'clock of the same night, the pains increased in severity and frequency, and about 2 o'clock in the morning, the uterus was emptied of its contents, and of course the hemorrhage stopped, and the patient was relieved. She still had some fever the next morning when the sister reported to me the condition of the night before, and that the mass had been expelled, and I ordered a large dose of Castor Oil, and told her that I would be out in the afternoon to see the patient, and requested her to preserve the clots and other things that had been passed as I wished to examine them. The flow now was that of the lochia, no more active losing being evident, and I presumed that all had come away during the night. The fever had dropped to about normal after the bowels were well evacuated, and the patient was very comfortable, but the pulse was still fast, evidently from the loss of blood, which had been considerable for several days.

The mass was composed of innumerable small grape like bodies of vesicular formation. Between these vesicles were found blood coagula of large and small dimensions. The placenta was al-

so found, and was in a fairly well preserved condition. Judging from the development of this placenta, the patient must have been further advanced in

pregnancy than she had thought for.

She had an uninterrupted recovery, and went home about two weeks after the mass was expelled.

WHAT THE COUNTY MEDICAL SOCIETY MAY DO TO PREVENT THE SPREAD OF TUBERCULOSIS.

T. W. Laros, M. D., Lincoln, N. M.

While it is desirable that we have International, National, State, Municipal and County laws for the control and prevention of tuberculosis, with county medical societies and health officers working under such authority, nevertheless, no such condition at present prevails and we, as physicians, should ever be on the alert to influence the adoption of legislation for the purpose of prevention and ultimate eradication of tuberculosis. By a united effort of the people of the entire country, it is possible in a few generations to stamp tuberculosis from the face of the earth.

Among the first steps necessary, is the education of the public as to the dangers of infection and the importance of adopting and following the necessary measures to prevent infection and spread of the disease. To arouse the public from its lethargy is no easy task. The White Plague has ingrafted itself in the homes of so many and so familiar are its aspects, that the public are loth to look upon it with the fear that is manifested in other infectious diseases. One reason people are so tolerant of tuberculosis is because they are ignorant of the fact that the period of incubation is a long one, that infection in children and in adults may take place and no visible signs of the disease appear for a long period of time, for months or years, until the vitality of the individual infected is lowered. The public is also ignorant of the many small details necessary to prevent infection, and in the measures adopted against infection, veritably, "strain at a gnat and swallow a camel."

It is a mistake to think that tuberculosis cannot be contracted in the most favorable climate for its cure, for in the writer's experience histories have been taken, patients examined, and treated that contracted their trouble beyond a doubt in New Mexico, in California and in Colorado; so while the danger is probably less in a favorable climate, still it is just as essential that sanitary rules of prevention be adopted here as in an unfavorable climate.

Among the things that the county medical society may do to prevent the spread of tuberculosis is the inauguration of a campaign for the purpose of educating the public as to the danger of infection and the importance of the adoption of individual and public measures for the prevention and infection from tuberculosis. No more effectively can this be done than by beginning with the school children, the men and the women of the future. A course of public hygiene should be taught in simple language in the public schools, especial stress being laid upon tuberculosis. For instance the department of health of New York City has a small booklet in which questions and answers are given on the following subjects: "Tuberculosis. What it is." "How One Gets Tuberculosis." "How to Keep From Getting Tuberculosis." "How to Keep Persons With Tuberculosis From Spreading the Disease."

In Boston the following Health Rules for school children are used:

1. Health is wealth.
2. Do not put pins in your mouth.

3. Do not hold money in your mouth.

4. Do not put your fingers in your mouth.

5. Do not put pencils in your mouth or wet them with your lips.

6. Do not wet your fingers in your mouth when turning the leaves of books.

7. Do not put anything in your mouth except food and drink.

8. Never spit on your slate or on the floor or sidewalk.

9. Do not pick your nose or wipe it with your hand or sleeve.

10. Keep your face, your hands, and finger nails clean.

11. Keep the interior of your body clean by allowing nothing to go into it except pure food and pure drink.

12. Do not keep your rubbers on in the school room.

13. Do not sit with wet feet or damp clothing; resort to stove or register until they are dry.

14. Do not swap parts of apple, candy, chewing gum, half eaten food, whistles or anything else that is to be put in the mouth.

15. Never cough or sneeze in a person's face. Turn your face to one side and hold a handkerchief before your mouth.

16. When drinking rinse out the cup, and empty what water you leave in the wash basin.

17. Breathe fresh air day and night, simply avoid draughts.

18. Breathe, sit, stand and walk correctly. In so doing you will do more to prevent consumption than all the physicians combined. A good pair of lungs is the most efficacious barrier to this disease.

19. Go to bed early, rise early, and take plenty of physical culture, helping father before and after school with the chores.

20. Study the Physiology—to know

how to use rightly and take proper care of every part of the body.

Rules like the above impressed upon the minds of growing children are bound to have an influence on the prevention of tuberculosis as well as other infectious diseases. It is a sad commentary on our schools and colleges that so little attention is paid hygiene and the adoption of its rules. In many colleges so little attention is paid to the health of the students, who are crowded through its courses, as through a machine, regardless of their physical strength, that it is no wonder that so many of our young men and young women, on the threshold of life, find themselves nervous and physical wrecks, and often victims of tuberculosis.

The intricate relation of the family physician, in the homes of his patrons, gives him an exceptional opportunity to teach the necessity of proper ventilation night and day, the necessity of playgrounds and life in the open air for the development of growing children, the necessity of recreation and diversion for the tired housewife, the danger of overwork and irregular hours, and in many other ways can the physician teach health rules and guard the children and the family from infectious diseases, laying stress upon the fact that tuberculosis is the most dangerous of all others put together. The danger of close association of children with a careless consumptive or playing in rooms occupied by consumptives, the danger of infection of food of young children from flies that have bedraggled themselves in tuberculosis sputum, the danger from cows milk where the cows have not been tested and proven non-tuberculosis, are subjects upon which very practical, efficient teaching can be impressed upon the parents that will be very effective in the prevention of the spread of tuberculosis. The

family physician who has used his influence and worked to build up the resisting power of the children in the families with whose health he has been intrusted, and is conscious of the fact that on account of his efforts along these lines of health, he can point to large numbers of vigorous, healthy children, has indeed reason to be very proud.

The public through the county medical society can be educated by means of public lectures given by its members on "Health Rules" or some such subject that will cover that loathsome, uninteresting subject "Consumption." Circulars, tracts, and literature of different sorts can also be distributed. The local newspapers, ever ready to aid in a work for the good of the public, will be a great factor in educating the people by continually keeping before them the sources of infection and the rules of prevention. People are but grown-up children and constant repetition is necessary to impress them. The traveling tuberculosis exhibit, along with its lectures and lantern slide illustrations, is of incalculable value and where ever possible should be utilized in every town and village.

While it is our duty in public lectures to dwell upon the importance of destroying the sputum of consumptives and the necessity of requiring the use by them of destructible sanitary pocket and hand cups with lids, and in fact to lay emphasis upon the destruction of all excretions of tuberculous patients, nevertheless it is not only unkind but unjust, not to state with equal emphasis that there is no danger, with proper precautionary measures, from association with the careful and cleanly consumptive.

Among other things, the County Medical Society may organize an Anti-Tuberculosis League of the citizens of the community and of the charity or-

ganizations and through such a league raise funds for the supervision and care of the consumptive poor of the community. Incorporated towns should pass anti-spitting ordinances and an ordinance providing for the proper supervision, and enforcement of sanitary measures by the county health officer or municipal health officer, for consumptives, who are not under the guidance and supervision of a reputable physician. The state, county, or municipal authorities should require the compulsory notification to the board of health or to the health officer of the consumptives of each locality, their names to be registered, locality where they live, their ability to conform to necessary sanitary measures of prevention, and whether considered hopeless cases or not should be recorded.

The fumigation and disinfection of houses and rooms vacated by consumptives, as well as proper disposal of infected bedding is a measure to be adopted by physicians in every locality.

The time is not far distant when every community will demand that the hopeless cases, from which there is the greatest danger of infection, shall be placed in a hospital or sanatorium for such cases. The support of such an institution by the public will be money well spent in preventing the spread of the disease, as well as a Godsend to the sufferer, making more comfortable the remaining days of the afflicted.

These suggestions of prevention carry with them only a part of the public and private measures to inaugurate against the prevention of tuberculosis, in localities where we, as physicians, have to work independently of the authority of the law. A thorough arousing of the public will ultimately bring the desired legislation as well as appropriations, by private subscriptions, by the State and by the National Government,

for the prevention and eradication of tuberculosis.

A measure to be worked for by physicians, endorsed by medical societies, and worked for by the citizens of every community, is the passage of a law for the establishment of a Department of Public Health of the United States. Such a department of health, broad in its scope and powers, not restricting its work to the health of the Army, or Navy, or Sailors of the Merchant Marine, but a Department of Health for the good of all the people

of the Nation, is greatly needed if for no other purpose than to combat tuberculosis. Such a Department of Health, with state, county, and municipal authorities co-operating, would be the means of dealing with all infectious diseases with an authority and an efficiency greatly needed in a long drawn out campaign such as there must of necessity be in the fight against tuberculosis.

Read at the S. E. N. M. M. A., Roswell, April 20th, 1910.

SURGERY OF THE KNEE JOINT

By W. G. Hope, M. D., Albuquerque.

Diseases of the knee joint are chiefly inflammatory, and may be anatomically divided into three classes: Synovitis; capsular arthritis; osteo-arthritis.

By *synovitis* is usually understood an effusion, more or less liquid, into the joint cavity. The effusion may be pure blood, serum or pus.

Nature of the effusion can be harmless.

Since pneumatic aspiration with aseptic precautions came into vogue, the nature of the effusion can be harmlessly and often beneficially investigated. Effusions of blood are often entirely liquid, but sometimes coagulate shortly after issuing into joint; effusions of serum also sometimes undergo partial coagulation of thin, yellowish fibrin. Effusions of pus, properly withdrawn by aspiration, after efficient fixation in a straight line, are sometimes cured after one or more—sometimes very few—tappings. The bacteriological examination of the pus shows microcci, indicating the character of the inflammation, which may be pyemic or gonorrhoeal.

The differential study of these conditions is favored and treatment often expedited by merely tapping; in fact,

much clinical light is thrown into the knee by tapping.

Effusions into the knee joint are easily seen and felt by the bulging of the joint cavity, everywhere in some cases, but frequently in the suprapatellar region alone. This condition may exist without severe symptoms, coming on gradually and almost imperceptibly at times, and then causing no other symptoms except a weakening of the knee, and diminished activity of the limb; but in other cases, pain and total disablement, with or without acute fever. When synovitis is caused by sprain, or other sudden injury the fluid effused may be pure blood—but is usually serous.

In the knee where either semi-lunar cartilage has ever been dislocated, a slipping may recur on the slightest provocation, and may give rise to severe synovitis. If the cartilage be still displaced, evidenced by the painful "locking" of the knee when full extension is attempted, it is possible to reduce it by the classical method; Fixation and traction, internal rotation with extension; "But after entire subsidence of acute symptoms, the trouble is likely to re-

cur, and may eventually necessitate the removal of the oending cartilage."— (Warren & Gould.)

Attacks of synovitis, with or without the thickening that indicates general capsular arthritis, are not infrequently found associated with a present gonorrhoea or gleet, or a history of a recent attack. Such cases, well fixed in the proper splint, may be rapidly relieved, but if not, it is well to aspirate after fixing the limb. If the temperature is raised, suppuration may be suspected, and by aspiration readily found. The number of tappings depends upon the effect; one, two or three, at intervals of twenty-four, forty-eight hours or of several days will generally suffice. The urethral discharge, meanwhile, should be treated locally vigorously.

Gonorrhoea is highly amenable to tappings and usually recovers quickly, but the prognosis must always be guarded, as fibrous ankylosis will sometimes occur in spite of all treatment.

In treating a case of synovitis, it is important to keep rigid and straight, a common method of treating these cases is ordering patient to bed and using fermentations until pain ceases or recovery ensues. This method is often a sheer waste of time, and by delay aggravates an acute and often quickly surable synovitis with a subacute or indolent chronic condition.

There are cases of a rheumatic or gouty character in which fresh air, slight exercise and perhaps massage, are of importance, while fixation of the joint is not. But ordinarily fixation on a splint, with some compression, is

necessary.

Capsular Arthritis is a general inflammation of the capsule and occurs in case of sprain or other injury, with or without synovial effusion. The peculiarity about capsular arthritis is that the capsule is affected by the inflammation evidently whereas in synovitis there is effusion without such participation and thickening.

Tubercular arthritis is often of this kind, though practically always the primary focus is in the bones.

Treatment: A case of early arthritis of this type, (capsular), may often rapidly improve, if the joint be fixed and rest given. It is not possible that all cases of synovitis can be cured even with perfect mechanical treatment, even when supplemented by aspiration. Cases of suppuration may require incision. Some are so virulent that total destruction of the joint results, and amputation is required to save life. Others go on to form ankylosis of the joint, in spite of all attempts of aseptic management. When an obstinate suppuration of the knee joint is established, ankylosis is almost certain to result if patient and limb survive.

In puncture or wound of knee joint, and more especially if the wound be merely suspected, the only wise course is to explore the wound under an anaesthetic, carefully fix the limb straight and apply an aseptic dressing to the part, preferably *without* closing the wound.

Tubercular Type. Resection or amputation in adults. Fixation, high soled shoe on sound foot in children.

THE DIAGNOSIS OF PELVIC INFLAMMATION.

H. A. Ingalls, Roswell.

By common usage we have limited the term "pelvic inflammation" to include only the female reproductive or-

gans and the surrounding peritoneum, hence this paper will cover the diagnosis of endometritis, salpingitis, local

and diffuse suppuration and the inflammatory diseases of the ovaries and the pelvic peritoneum.

In a broad way endometritis may be divided into two forms; acute and chronic.

The diagnosis of the acute form presents no difficulties. The patient has fever and complains of pelvic pain. An examination will disclose a profuse discharge from the cervical canal which may be bloody, mucoid or purulent, with the uterus tender to pressure.

A microscopic examination of the discharge will be necessary to enable a positive diagnosis as to the organism acting as the infecting agent.

In chronic endometritis we must rely on the history rather than the objective signs for our diagnosis. Doubtless the most important symptom is that of hemorrhage. The patient will usually state her "period" has extended beyond her usual time or that she is losing more blood each month; others will inform us she is menstruating every two or three weeks instead of the usual 28 or 30 days. Some will give a history of excessive loss of blood followed by one or two months of amenorrhea.

There is usually a history of a more or less constant leucorrhea, the nature of the discharge varying with the form of infection.

The discharge is often associated with pain and a sense of fullness in the pelvis. The pain may be referred to the back, the costal arch, or the legs, but is usually a definite uterine cramp and described as "labor like pains."

Frequently premenstrual symptoms are mentioned, such as nausea and vomiting, vague pains in various portions of the body and a feeling of depression beginning several days before each period.

Two special forms should be mentioned; fungous and dysmenorrheic. In

the fungous type severe bleeding is about the only symptom, there being neither pain nor leucorrhea, while in the dysmenorrheic type there is absence of haemorrhage and discharge; uterine pain with a normal menstrual flow being the symptom.

Salpingitis we also divide into acute and chronic, excepting the tubercular form, which is always chronic.

In the acute form the temperature is high and the pulse rapid. The patient complains of pains on either side of the median line and gives a history of a previous endometritis when questioned.

Bimanual manipulation will make positive the diagnosis, the swollen, tender tube being easily felt by the examining finger.

The chronic form may result from failure to arrest an acute attack or may be chronic from its inception.

In all cases there is a history of uterine infection and one of three conditions are to be expected; sclerosis, hydrosalpinx or pyosalpinx.

In sclerosis there is severe pelvic pain, scanty menstruation, very slight leucorrhea and absence of fever. The uterus will be found atrophied and bound by dense adhesions and the tubes felt as hard cords.

In hydrosalpinx the pain is not constant and the tumor not sensitive to pressure. Distinct fluctuation is obtainable and the attachment to the uterine horn of that side renders diagnosis easy.

In pyosalpinx the symptoms vary from mild discomfort to that of profound sepsis.

Upon examination evidence of inflammatory changes are to be found. The pelvic organs will be found more or less fixed by adhesions and tender masses occupying the position of the tubes, these cases usually being bilateral.

If unilateral and the history not clear as to infection the diagnosis can only be made by opening the cul-de-sac, as the tubercular form very closely resembles this condition.

Local suppuration is confined to the folds of the broad ligament and is due to lymphatic infection.

Upon examination the uterus will be found displaced to the opposite side and a fluctuating mass occupying that side of the pelvis. The history of rigors and fever of the septic type completes the diagnosis.

Diffuse pelvic suppuration is a chronic condition and is only found after repeated attacks of pelvic peritonitis. The patient is always profoundly septic and upon examination the pelvis is found to be so filled with exudate it is impossible to outline any of the normal structures.

Inflammatory diseases of the ovaries may be divided in purulent and non-purulent.

The first give rise to but few symptoms unless the process leads to degenerative changes when the pressure

causes pain or cystic change causes uterine hemorrhage.

The suppurative condition very closely resembles pyosalpinx already described.

Pelvic peritonitis usually follows manipulation within the uterine cavity. The first symptom, that of chill, appearing in from 48 to 72 hours after abortion or other unclean work, followed by high temperature.

The patient has a dry, red tongue, slightly coated, not much pain, but marked tympany. The pulse is rapid and the patient soon becomes dull and delirious.

At first there is a serous exudate, followed by lymph, but unless definite organization can take place the exudate becomes purulent.

The general appearance of the patient is that of a low typhoid state. Examination will show a fluctuating mass in the cul-de-sac and the pelvic organs immovable.

Read before the C. C. M. S., June 13, 1910.

BOOKS REVIEWED

PREPARATORY AND AFTER-TREATMENT IN OPERATIVE CASES. By Herman A. Haubold, M. M., Clinical Professor in Surgery and Demonstrator of Operative Surgery in New York University and Bellevue Hospital Medical College, New York. Octavo, pp. 650. With 429 illustrations. New York and London: D. Appleton & Co. 1910. (Cloth, \$6.00).

The author of this excellent work has succeeded in placing before the practitioner in compact shape a mass of material that heretofore has not been

published in separate form. These question have been dwelt with in surgical textbooks, but as a general rule in a more or less imperfect manner; or, at least, owing perhaps to crowded space, in an incomplete fashion. Here, however, we find a book quite as large as many of the earlier complete treatises on surgery, devoted only to the preparation of patients for operation and their care and management afterward. Of course, in the preparation of the patient as applied in the foregoing sentence is included also that of the

operating room, the instruments, suture and ligature material, water and cleansing solutions, operator and assistants, nurses, together with the drainage, suturing, and dressing of operative wounds, though the latter more properly perhaps, belong to post-operative attention.

The after-treatment includes shock and secondary hemorrhage; vomiting, thirst and pain; feeding after operations; the general care of wounds after operations; the adjustment of artificial limbs; skin grafting and miscellaneous matters pertaining to post-operative management.

Beginning with operations on the scalp, skull and brain, the author takes up the preparation of the patient, and the after-care pertaining to almost every operation on the face, neck, thorax, spine, abdomen, stomach, intestines, liver, female pelvic organs, the vaginal route operations; operations on the rectum and anus; on the kidney and ureter; on the bladder and prostate; on the scrotum and penis; and, finally, operations on the extremities and miscellaneous operations. He shows how to prepare the patient for these operations and deals with the after-management in each condition. Such a work has become useful, if not necessary, by reason of the application of asepsis and antisepsis to operative surgery, as well as to injuries of the body. Haubold clings to the absurd word "celiotomy," which should be banished from literature. The book is especially useful to

the general practitioner, yet every operator should possess it, and every student should study it.

THE SCIENCE OF LIVING, or the Art of Keeping Well. By William S. Sadler, M. D., Professor of Physiologic Therapeutics, Post-Graduate Medical School, Chicago; Director of the Chicago Institute of Physiologic Therapeutics; Member American Association for the Advancement of Science; Etc. Cloth; 420 pages, illustrated. Chicago, A. C. McClurg & Co. \$1.50.

Sadler's book is clear and concise. Often we find it hard to explain simple matters to our patients; the reading of this book will show how it can easily be done.

In his preface, the author says:

"If the reader can be convinced that health and disease are not matters of chance; that they are regulated by the universal laws of sowing and reaping; that health when once lost is ordinarily regained only by faithful cultivation; that disease is due neither to the anger of the Gods nor to a mysterious dispensation of Providence; that sickness is a consequence, directly or indirectly, of a violation of Nature's laws: if these fundamental principles of health and disease are made plainer to the reader, and if the pathway to health can be more clearly opened up, then this book will have accomplished its mission and fulfilled the design of its author."—

It will.

NEWS ITEMS

ROSWELL

Dr. W. T. Joyner is away on a trip east to the various medical centers.

Dr. C. M. Yater has just returned from a visit to his old home and friends in Texas.

The Roswell city council has passed a new Sanitary Ordinance, the main features of which were passed upon and recommended by the Chaves County Medical Society, and it is thought that it is "good and very good."

Roswell is now enjoying an era of good health, there being but little sickness of any nature in the city.

The Chaves County Medical Society

still grows in interest, popularity, numbers and efficiency. It is doing much toward the improvement of the city health.

At the last meeting of the Chaves County Medical Society a communication from our Mayor, Dr. Geo. T. Veal, was read, warmly eulogizing the regular profession and accepting Honorary Membership in the Society. With such men as he holding the reins of our city government and backing up the medical profession, Roswell has nothing to fear from the sanitary conditions of the city.

COLFAX

Dr. Jno. L. Hobbs, Raton, has been spending some time in the hospitals of Chicago and at Mayo's hospital, Rochester, Minn.

Dr. Chas. E. Gayer and wife of Raton returned recently from an extended trip to Butte, Montana and Salt Lake City, Utah.

James G. Hopkins who, some six months ago, left Springer for Aguilar, Colo., returned to the territory the first of the month and has opened an office in Wagon Mound. Report has it that the Doctor is soon to be married.

Dr. L. L. Cahill has been appointed local surgeon for the A. T. & S. F. R.

R., at Springer.

Emory I. Whitehead, who was formerly located at Victoria, Ill., has settled in Springer, N. M.

Dr. W. A. Bayley of the El Paso & Southwestern Company Hospital, Dawson, N. M., will soon locate in Los Angeles, Calif.

Chas. O. McClurge of Starkville, Colo., graduate of Gross Med. Col., 1893, is taking the exam. at Santa Fe.

Wilbur P. Sipe, Flagstaff, Ariz., graduate Hospital College of Medicine, Louisville, Ky., '98, is in Santa Fe taking the examination, preparatory to locating in our new state.

LAS VEGAS

Dr. Losey went to Detroit to represent the Elks as representative in the Grand Lodge.

Dr. Fest contemplates a trip East at the later part of the month.

Dr. Desmarais went East on business.

The physicians have organized a Business Bureau for collections and it works satisfactorily.

Dr. Tipton was called to Madison, Wis., on account of the illness of his son Leo. We are glad to hear the young man recovered under his father's care.

The Hon. H. P. Brown, Supreme Chancellor Knights of Pythias, paid a visit to Las Vegas to inspect land and sites set aside by the municipality of both Las Vegas, for the establishment of the National Pythian Sanatorium. The dignitary of the order was very pleased with New Mexico climate and New Mexico spirit.

Dr. Hernandez, a former resident and practitioner, is here from his present home, Madrid, Spain, on a short visit.

President of Council Dr. Harrison, was here on a short visit and discussed Journal matters with his associate here and the editor.

Dr. Bradley spends his vacation in New England via an ocean trip to study the subjective symptoms of sea sickness between Galveston and New York.



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EDITORIAL

UNFINISHED BUSINESS.

To be considered at the coming meeting of the New Mexico Medical Society in Albuquerque. We quote from last year's report:

"Dr. G. W. Harrison gave notice of the following amendments to the Constitution:

"1. Amend Article 6 of the Constitution, by striking out the words 'ex-officio' after the words 'President and Secretary.'

"2. Amend the By-Laws, Chapter 5, Page 9, by adding the following: In cases of absence from regular meetings of any of the Councilors the House of Delegates shall elect a member of the Society from the respective district and who is present at session to serve until successor is elected. This amendment to take effect beginning with the year 1910."

"Dr. H. B. Kauffmann gave notice of an amendment to Article 4, Section

2, of the Constitution, by striking out the word 'regular' before the words 'Medical School.' "

"Dr. W. T. Joyner gave notice of an amendment to Article 9, Section 2, of the Constitution, which reads "Amend Article 9, Section 1, by striking out the word 'three' and inserting the word 'seven.' "

"Amend Article 9, Section 2, by striking out all that portion of said section referring to terms of Councilors and inserting the following: 'The terms of Councilors shall be for three years. Those first elected serving as follows: Two for one year, two for two years and three for three years, as may be arranged, so that after the first election, two shall be elected annually, for a term of three years and each third election, three shall be elected for a term of three years.' "

UNFINISHED AND NEW BUSINESS

A resolution was introduced to instruct the Committee on Legislation to consider a bill which provides for material for anatomical purposes. This committee will have to report and present a draft of legislation.

There will be a lively discussion on the question of "optometry." The Editor was requested to give his opinion, but in as much as our American Medical Association has already taken a stand, con-

denning all measures which have as sole purpose the legislation of practice of part of our profession by laymen. We have nothing to say except that the demand that the general practitioner know more about refraction is fully justified. We are informed that the passage of a resolution is contemplated

according to which it shall be unethical for any member of the New Mexico Medical Society to serve in any capacity on any Board legalizing part of the practice of medicine for laymen. This is a serious measure and it is well to consider the same thoroughly.

CRUSADE FOR MEMBERSHIP.

Would it that it were trite and unnecessary for us to consider with the individual practitioner the importance of, the benefits which may be derived from, active co-operation with the organized medicine in this territory? How many young men, many of these but recent graduates, have moved to this territory during the last year? How many of these have joined or have affiliated themselves with us? College Secretary in each county, did you do your duty towards us, towards yourself, towards these new arrivals?

The key-note of results here rests entirely with the activity of the county and district societies; as example we can point to the Southeastern New Mexico Society.

From somewhere we clipped for future reference:

"The man who does not attend medical meetings should be classed with the quacks. If he is above the average he should give the society the benefit of his wisdom; if he is below, he should go and learn. If you have a good idea, bring it with you; if you have a fallacy

the sooner you get it knocked out of you, the better for suffering humanity. The public would do better to inquire: "Do you attend medical societies?" than "Where did you graduate?"

We refer to the letter written by pioneer Beeson of Roswell and recall to our minds the words spoken by Bro. Fly at our last convention. We have failed in many things. We have been slurred and slammed by the former territorial government and legislature. It is our own fault. Our interests are not taken care of, the public welfare is neglected and for this progress, our's and their's, we need adequate legislation, for

"Legislation is the most obvious remedy, pending the enlightenment of the general public, or the awakening of the journalistic conscience."

A sanely aggressive organization of our profession is a necessity and the crusade for members must go on persistently, unceasingly, until the organization becomes a Colossus in its service to humanity.

SORE BECAUSE HE MISSED IT.

"Oh shame, where is thy blush? I read with sentiments of surprise and disgust that at a banquet given by or

for the Section of Surgery, A. M. A., amongst the 'amusements' furnished by the caterer was a 'nautch dance' by

a naked woman called 'Fatima,' clad, says the newspaper, in her combs and garters, and that 'a gray-haired doctor removed the garters.' It is inconceivable that any self-respecting physician could or would be a party to such shocking immoral, disgusting performance. The 'gray-haired' physician deserves the fate of Orestes—to be scourged by the Furies with whips of scorpions."—Exchange.

Why should not a crowd of men admire God's best creation in nature's own adornment? The surgeon has to see so many specimens of imperfect humanity that the perfect comes as a relief, a welcome change from the stale. One certainly expects that on such an occasion the "perfect" only be served.

It is found natural that the traveler should go and see a real Hullah Hullah. Some, otherwise rather dignified, faces were seen on such occasions clad in a rather pleased smile.

It does one good to remember the prim, gray-haired gentleman, who so faithfully and calling-attention-to-itly said his silent grace with lunch, tiffin, dinner and secret booze, who aboard the vessel every Sunday gathers around him a crowd of select devotees in service, and who observed so closely and, as he thought, privatissime a limber

demonstration of the daughters of Uled Nail, and who was heard again at home thundering forth against the perverse curiosity of Christian travelers in heathenish lands.....

In the interest of the spectators, let us hope that the dancing damsel danced gracefully as a well-formed "nautche," following her cult of Aphrodite Pandemos as seriously and conscientiously as the Shaker, Penitent, Monk or Dervish, gratify their religious demand. The name Fatima does not fit a nautche. The caterer must have been somewhat ignorant of geography and names, else he had not named his nautche "Fatima."

It is certainly as harmless to look at life beautiful as to look at a marble beauty, be it the Venus di Medici or an Apollo, or be it a classical painting a la nude.

The gray-haired doctor by this time, may be, has his wife's opinion on the subject. Perhaps he had harvested a few crops of untamed oats in the Indies and knew therefore that nautches use no garters. He just wanted to perfect the imitation. Why should any pedantic editor misconstrue his intentions?

To the critic we say: "Read Thou the stories about the son of Mary and cast Thou no stones."

THE NEW MEXICO ASSOCIATION FOR THE STUDY AND PREVENTION OF TUBERCULOSIS,

Last year at the meeting of the New Mexico Medical Society the New Mexico Association for the Study and Prevention of Tuberculosis was organized. At that time a membership of about twenty physicians was secured and it was agreed that in the future yearly meetings should be held at the time of the state society meeting. Acting on that agreement the association will this year meet with the New Mexico Med-

ical Society at Albuquerque, September 29th, 30th and October 1st. It is the desire of the officers that at this meeting an afternoon be set aside for the discussion of problems relative to tuberculosis and to that end the secretary asks anyone who may wish to present a paper along these lines to send in the subject at once in order that a proper program may be arranged. It is the desire of this organization to deal with all

sides of the consumptive problem, both clinical and social and papers touching on any phase will be gladly accepted. The Southwest has problems entirely its own and problems that are foreign to the same organization as our eastern states. It is a well known fact that heretofore nothing has been done in New Mexico relative to the proper handling of the great influx of consumptives into this favored territory. We grant that private sanatoria have been established and great good done to those who have means to follow the benefits of treatment in these institutions, but the one great problem for which no satisfactory solution has been given, that of the indigent consumptive, is still open for discussion and solution. Then, too, the less vexing questions regarding the municipal control of the disease and the prevention of its spread among the native population and the dissemination

of infection to our own non-tuberculous families must needs require the attention of our scientific bodies else the great southwestern territory with its healthgiving climate will become a hot bed of infection and be transformed from a lungers paradise to a veritable hell hole of disease. These and many more problems must be solved by the physicians of the southwest and it is only by organization that results worth while can be obtained. You owe it to yourselves and to your families to meet with us at Albuquerque and lend a helping hand by affiliating with a society that stands for all that is best in the fight against the great White Plague. We are now in affiliation with the National Association and with the united efforts of the profession of New Mexico this organization can be made one of the strongest in the country and one that will be productive of untold good to suffering humanity.

SELECTED ARTICLE

WHAT THE MAYOR AND CITY COUNCIL CAN DO IN THE PREVENTION OF TYPHOID FEVER.

By L. L. Lumsden, Passed Assistant Surgeon, United States Public Health and Marine-Hospital Service.

Since the early dawn of civilization the conservation of human health has been a problem in the minds of men and has received more or less consideration from those responsible for the welfare of the tribes and nations. Public hygiene was cultivated to some extent among the ancient Egyptians, and in the code of sanitary laws given to the children of Israel by Moses there is contained much that might be adopt-

ed advantageously by many of our communities in the twentieth century.

From time to time infectious diseases have swept as great epidemics over different parts of the world. The peoples rudely and terribly awakened to the existence of these devastating scourges have grouped in darkness to find ways of escape. Various and at times most fantastic hypotheses have been adopted to account for the visita-

tions. In this dense wilderness of doubt and fear, of superstition and ignorance there have appeared from time to time men of science who, basing their conclusions on carefully observed facts, have blazed a trail toward the light. In the nineteenth century many men of this type appeared and wonderful progress was made.

The twentieth century, bringing the accumulated knowledge of the past, presents us with wonderful opportunities. Efficient methods of preventing most of the widely prevalent infectious diseases are now perfectly clear. Shall we endeavor to apply these methods or shall we await the developments of the future in the hope that methods of easier application may be discovered? Such postponement would seem no more justifiable here than it would in other fields of endeavor for the betterment of the human race. While awaiting the discovery of better methods innumerable lives may be needlessly lost. It is, therefore, a plain duty for us to employ to the best possible advantage such instruments as we have at hand the efficiency of which has been demonstrated.

Application of Methods to Prevent Infectious Diseases.

Although efficient methods to prevent most of the infectious diseases are now well known, yet in many instances the securing of ways and means to get these methods applied in a given community remains a grave and difficult problem. To the inexperienced the passage of laws requiring the enforcement of the methods would seem a simple solution of this problem. Convince the average citizen of the existence of some condition deleterious to the community and at the same time remediable, and as a rule he will say, "There ought to be a law against it." This observation

in many instances is no doubt quite true, but the practical question which always arises in this connection is, Is the community ready for such a law? In other words, are the people willing to be subjected to such inconveniences and curtailment of personal liberties as may follow the enactment of such a law for the benefits which may accrue? Ruskin once somewhat cynically observed:

An interference which tends to reform and protect the health of the masses is viewed by them as unwarranted interference with their vested rights to inevitable disease and death.

Such a view among "the masses" is certainly becoming more and more exceptional. If the people have the facts about a grossly insanitary condition properly presented to them, they will, as a rule, become convinced of the advisability of having such condition corrected, and not only tolerate, but in some instances demand interference by the sanitary authorities.

The people generally, under the various educational influences of modern times are adopting higher and higher standards of sanitation. Conditions which were once viewed with indifference or helplessness, are now abhorred.

Under a republican form of government no law can be successfully enacted which does not represent the strong convictions of a strong majority. The people, having the power of appointment of the makers and the administrators of the law, are the ultimate arbiters of the form of government under which they shall live. Education of the people, taken in a broad sense is, therefore, essential to advancement in sanitation, or disease prevention, as in other measures for the uplift of our nation.

The adage "Nothing succeeds like success," is particularly applicable to the work of disease prevention. In

these days of publicity a successful fight against a disease in any particular community will be heralded abroad, and may have a widespread—even a world-wide—educative influence. Among the many brilliant achievements in sanitation within recent years which have had such influence, a few may be mentioned: The eradication of yellow fever from Habana, Cuba, and New Orleans, La.; the sanitation of the Isthmian Canal Zone in Panama; the eradication of bubonic plague from San Francisco, Calif.; the marked reduction in hookworm disease in Porto Rico; and the eradication of typhoid fever from Trier, Germany.

A successful campaign against one infectious disease in a community educates to a considerable extent the people of that community to an understanding of the feasibility of successful campaigns against other infectious diseases. The proper disposal of sewage in order to eradicate hookworm disease and typhoid fever are caused by infections which are disseminated, primarily, essentially and solely from faultily disposed-of excreta from human beings. The prevention of sewage-borne infections is certainly one of the most vitally important economic problems which our Southern states are confronted today. There is abundant indisputable evidence that the proper disposal of human sewage will prevent typhoid fever, hook-worm disease, the dysenteries, much of the diarrheal disease of infant and adult life, and many of the diseases caused by the larger animal parasites; by preventing these and perhaps many other infections, it will probably operate to markedly reduce the prevalence of tuberculosis, pneumonia, and other diseases, possibly including pellagra.

Thus in proper sewage disposal we have a measure which is of remarkably broad application in the preven-

tion of disease. As a simple prescription with "shot-gun" effects, it can be most highly recommended for the ills of the community.

With the facts which the accumulated knowledge of the ages lays before us, can anyone doubt the wisdom of a municipality when it spends sufficient money to secure a proper disposal of its own sewage and to prevent to a reasonable degree the spread of infection coming through various media from the sewage of other communities? Can anyone doubt the wisdom of a dweller in a rural section when he expends a few dollars or a little labor for the construction and management of a sanitary privy and thereby saves in doctors bills alone many times over the amount of his expenditure? The value of the health and happiness preserved to the people by the use of this simple sanitary device can not be measured on a monetary basis.

Typhoid fever presents itself as a striking example of the diseases due to sewage-borne infections, and therefore may be appropriately taken up for somewhat specific consideration.

Prevalence of Typhoid Fever.

Typhoid fever has been defined as "a disease of civilization," but as Sedgwick well says:

It ought to be clearly understood that it is only a disease of defective civilization, for it has gradually become notorious that the widespread or frequent occurrence of typhoid fever in any community must be due somehow to defective sanitation, and defective sanitation means defective civilization.

There are in the United States comparatively few communities of over 1,000 persons, which, during any period of twelve consecutive months within the past decade, have been entire-

ly free from typhoid fever. According to the Census Report for 1900, the average typhoid fever death rate in the United States was 46.5 per 100,000 inhabitants. This means that in the census year, which may be taken as an average, there were about 500 cases of and over 46 deaths from typhoid fever among every 100,000 persons composing the American nation. The total number of deaths from typhoid fever recorded that year was 35,379, which gave this disease fourth place on the mortality list.

The rate of prevalence of typhoid fever in the United States in comparison with the rates in other countries is high. Thus the annual typhoid death rate per 100,000 population for the period of 1901-1905 was in Scotland, 6.2; in Germany, 7.6; in England and Wales, 11.2; in Belgium, 16.8; in Austria, (1901-1904), 19.9; in Hungary, 28.3; in Italy, 35.2; while the rate in the United States during the same period was about 46 (estimated.)

Do not these figures plead eloquently that in the development and exploitation of the wonderful natural resources of our country it is high time that serious consideration be given to measures for the conservation of that most important of all resources, the nation's health?

Some of the European countries now having relatively low typhoid rates formerly had high rates. Their climatic conditions seem to be as favorable to typhoid infection as those in the United States as a whole. Therefore it appears reasonable to conclude that this decidedly low typhoid rates have been brought about by their better enforcement of the preventive measures.

In the United States the disease is especially prevalent in the South. According to the figures of the United States Census Report for 1900, the 10

states, which had the highest typhoid death rates (averages, about 79 per 100,000,) are all states located south of the Potomac and east of the Mississippi rivers; the 10 states which had the lowest rates (average, about 20 per 100,000) are all Northern or Western states. Some of the Northern states formerly had high rates, as high as or higher than those which some of the worst affected Southern states have had in recent years. In Massachusetts, for example, in the decade 1871-1880, the average annual typhoid death rate was 62 per 100,000, while in the period 1901-1905 it was 18.2.

The lowest typhoid death rates in the Northern states have followed improvements in the water and milk supplies, the installation of better sewage disposal systems, and improvements in general sanitary conditions. The high rate of prevalence of typhoid fever in the South may reasonably be attributed to the following conditions:

1. Faulty sewage disposal incident to the relatively large rural population, and, particularly, as pointed out by the investigations of Stiles, (a) to the large percentage of negroes in the population.

2. Climate; the long periods of warm weather when there are additional agents for the transmission of the infection, such as flies and other insects and when greater quantities of uncooked foods and beverages are consumed and there is probably increased individual susceptibility to the infection.

It is certainly possible, and by some regarded as even probable, that whatever increased susceptibility to typhoid infection may exist in warm weather is due largely to the ingestion of organisms which are disseminated from faultily disposed of human excreta. In this hypothesis be correct it is certain that the proper disposal of sewage will

completely prevent the operation of all the factors in the production of typhoid fever which are particularly favored by warm weather conditions.

Considering the number of communities in the South in which polluted water supplies have been used for long periods, it is a notable fact that there have been reported in the South no pronounced and extensive epidemics of typhoid fever caused by water-borne infection. It may be that the causative organisms in the relatively warmer river and lake waters of the South do not survive in sufficient numbers to cause pronounced epidemics. In some communities in the South, as has been shown for some in the North, water may play an important part, but judging by the limited data available, it seems probable that water is a relatively much less important factor in the spread of the infection in the South than it is in the North.

Not many years ago typhoid fever was regarded quite generally as being largely or entirely a water-borne disease, and the purity of a community's water supply was estimated from the typhoid death rate. Careful epidemiologic studies have shown that in some communities there may be a high typhoid death rate due largely or even entirely to factors other than water in the spread of the infection, and sanitarians now regard the typhoid death rate of a community as a fair measure of the intelligence exercised by that community in respect to sanitation in general.

Nature and Source of Infection.

The modes of dissemination and the means for the prevention of typhoid fever are now quite well known—in fact there are few other infectious diseases about the spread of which so many convincing facts have been re-

corded. Notwithstanding the accumulated knowledge and its ready availability, the general public still, in too frequent instances, is found to be woefully ignorant of the nature of typhoid infection and of the fact that the disease is thoroughly preventable. In many communities the people regard the occurrence every year of a certain amount of typhoid fever as inevitable, and accept it with complacency. But if in one of those same communities a few cases of Asiatic cholera should occur, the people generally would become keenly awake to the situation and urgently demand protection. The newspapers would publish, on front pages with glaring headlines, vivid accounts of the disease; the purse strings of the public treasury would be loosened, and if the funds there were not sufficient to meet the emergency more could readily be obtained by popular subscription. In consequence of these earnest activities Asiatic cholera would soon be eradicated. Typhoid fever is effort at prevention than does typhoid just as preventable as is Asiatic cholera and, it so happens, is spread in exactly the same ways and can be eradicated by exactly similar measures. Both diseases are caused by germs which are parasitic in nature and dependent upon man as their permanent host for their continued existence. These germs are contained in the dejecta from the bodies of infected persons. From such dejecta they may be conveyed by various agents such as water, food, fingers, flies, etc., to the alimentary canals of healthy persons and so be continued on their disease and death-dealing course. To prevent these diseases it is evident, therefore, that all that is necessary is to disinfect the excreta from infected persons, or to dispose of these excreta in such a way that the germs contained in them can not be conveyed to other persons. This plan of action

seems simple enough, and if it can be made sufficiently wide in scope, it will undoubtedly prove successful. The problem has, however, certain complications which increase the difficulties of its solution.

1. Certain persons continue to harbor the germs in their bodies and to discharge them in their excreta for weeks, months, or even years after complete recovery from clinical symptoms of the disease. Other persons contract the infection and, although never having a clinically recognizable attack of the disease, become berr carriers. In order to safeguard the community against these sources of infection it is necessary to have the sewage of all persons—the sick and the well—properly disposed of.

2. The persons in a given community may use water milk and various foodstuffs coming from a distance and liable to be contaminated with the excreta from infected persons over whom their own local officials have no jurisdiction; thus the problem may become of state, national, or even international extent.

But these difficulties are not insurmountable. Should the disaster of a cholera epidemic fall upon this country there is not a question of doubt that effective measures for its eradication would be promptly adopted. Since this is true for cholera, it seems evident that it is the duty of every good citizen to strive with might and main to awaken the people from their lethargy in respect to the preventability of typhoid fever.

Functions of the Mayor and City Council.

The functions of the governing body of the municipality are legislative, administrative, and educative. In performing one of these classes of func-

tions it performs to some extent the others also. If laws be made wisely they can be administered successfully. The successful administration of wise laws—laws for the public welfare—will exert an educative influence upon the people, and so facilitate the subsequent enactment of laws of similar character. It is also true in these days of an awakening public that the enactment of flagrantly bad laws will have an educative effect, in some instances with disastrous consequences ensuing to the perpetrators of such laws.

The men in a municipality who are elected by the people to the mayoralty and to the city council are so elected because the majority of the people are made to believe that they will advance the best interests of the municipality. In some instances—exceptional ones now, let us hope—an organized and active minority may elect candidates to represent special interests which are opposed to the best interests of the unorganized and inactive majority. But in these days of publicity and of civic federations the opportunities of those who work for such selfish interests are becoming fewer, and the ways of the transgressor harder.

Officials who would advance the best interests of the municipality should know that one of the most important and vital of all these interests is the conservation of the health of the people. In this connection the great English minister, Disraeli, once said:

Public health is the foundation upon which rest the happiness of the people and the power of the state. Take the most beautiful kingdom, give it intelligent and laborious citizens, prosperous manufactures, productive agriculture; let arts flourish, let architects cover the land with temples and palaces; in order to defend all

these riches, have first-rate weapons, fleets of torpedo boats—if the population remains stationary, if it decreases yearly in vigor and in stature, the nation must perish, And that is why I consider that the first duty of a statesman is the care of public health.

Of the widely prevalent infectious diseases none promises better results from equivalent amounts of intelligent fever, and in the prevention of this disease, therefore, municipal officers have a great opportunity.

What the Mayor and City Council Can do in the Prevention of Typhoid Fever.

(1) *Become informed as to the nature of the infection, its modes of spread, and the methods to prevent it.*—This information is now readily available. It may be obtained by applying to the local health office, the state board of health, or to the United States Public Health Service at Washington. Anyone possessed of moderate intelligence can learn this simple lesson in hygiene, and it is the plain duty of every good citizen, particularly of those composing the governing body of the municipality, to at least try to learn it.

(2) *Make disease prevention a conspicuous policy of the administration.*—Such a policy is undoubtedly a most praiseworthy one, and if adopted with common sense and propriety can be made a most popular one. A candidate for re-election to the mayoralty or city council can point unhesitatingly to his achievements in protecting the health of the people as one excellent reason for his continuance in office. It has been remarked that "practical politicians in a municipality usually regard the health office, not as a political asset which may be used to advantage in campaigns, but as a grave liability with a great capacity for getting the

administration into trouble." This estimate is not necessarily correct, and within recent years it has been reached in a number of instances that the good record of the city health office may be used as one of the winning cards in local campaigns.

(3) *Make efficiency the primary basis of appointments to positions in the health office.*—It is the health officer's success in disease prevention and not his particular political affiliations which will reflect credit upon the administration. His work is of a highly specialized character requiring of him for its successful accomplishment, special technical training. The intelligent individual citizen, when ill, engages as his physician one whom he believes to be skilled in his profession, and in his selection gives little or no consideration to the political affiliations of the physician. The municipality should exercise similar intelligence in selecting its physician—the health officer. The administration in retaining in office an efficient city health officer who has been appointed by a previous administration deserves, and usually will get, the approbation of the people. The administration in dismissing from office such an incumbent and appointing in his place a decidedly less efficient man deserves, and should get, the grave censure of the people.

(4) *Provide adequate salaries for health officers.*—The salaries paid health officials, particularly of cities having less than 100,000 population, are, as a rule, ridiculously small. In consequence, active and efficient services can not be expected. The man of ability who holds the position of health officer usually can not afford to give up his other and more lucrative work in order to devote his time exclusively to the duties of the health office. The salary should be made commensurate with the duties and responsibilities

of the position, and the municipality should then demand that the duties of the position be energetically performed.

(5) *Appropriate funds for sanitary improvements as liberally as the taxation rate will permit.*—In the average municipality there are so many public improvements needed which the funds of the treasury are inadequate to provide that it is, no doubt, very difficult at times for the municipal authorities to determine to what purpose the scanty funds can best be put. Of the conditions affecting the welfare of the whole people of a community, a good sewerage system and a good water supply are certainly among the most vitally important. If the treasury funds are insufficient to provide these, the city authorities should keep the facts clearly and persistently before the people. By so doing, the people eventually may be made to understand and become not only willing but anxious to supply the necessary funds.

(6) *Provide for the collection of mortality and morbidity statistics so that the results of sanitary work may be known.*—This can be done with very little cost to the municipality. The enactment of an ordinance requiring physicians to report cases of infectious disease, and undertakers to file certificates of causation of death in order to obtain burial permits, will accomplish it. Without these statistics, which are the "bookkeeping of sanitary science," it is practically impossible to tell what progress is being made. In some instances the attempt may be made to conceal the facts about health conditions in a city for fear that if the conditions become known the business interests will be injured. It is just about as easy for a community to succeed in such concealment as it is for a man to conceal the fact that he has a broken leg by making efforts to run. The tac-

tics are bad and the results usually disastrous. It certainly seems more in accordance with sound business principles for a city to know its health conditions, to improve them, and then use the improved conditions as a basis for legitimate advertising.

(7) *Provide for the proper care of the sick.*—For every case of typhoid fever originating in a municipality, the municipality is to a large extent responsible. The patient's bedside is a fountain head of infection. There the infection may readily be destroyed, but once allowed to escape from there, it may be disseminated in various ways and become very difficult, or practically impossible, to trace and destroy. Therefore, the municipality, not only on account of its ethical obligation for the development of the case, but also to safeguard the community, should provide for the necessary precautions at the bedside of the patient. If the patient's family can not be coerced into carrying out the measures, the municipality should provide hospital accommodation or free nursing and disinfectants.

(8) *Keep in close touch with and support the health officer in his work.*—You fight a common enemy, and unless you have concerted action you can not expect to wage a successful warfare. When the mayor and city council can not agree with the health officer on the plan of campaign, it is time either for that mayor and city council or for that health officer to be removed from office.

(9) *Cooperate with the authorities of other municipalities, of the State, and of the nation.*—A municipality which dumps its untreated sewage into a stream used as a source of water supply by municipalities downstream can not consistently ask the municipalities upstream not to pollute this water with their sewage. In sanitation, munic-

ipalities, even as individuals, may adopt to practical advantage the good old golden rule "to do unto others even as you would have them do unto you."

(10) *Teach by precept and by example the precautionary measures.*—The mayor and the city councilmen have been honored with the confidence of the people and have been appointed to the leadership of the municipality. Therefore their conduct, in respect to the simple rules of sanitation at least, should be exemplary. What they do quietly and consistently to safeguard their own households may impress some of their neighbors more profoundly than what they proclaim from the rostrum in the heat of political campaign. If they believe the water is polluted, they should use boiled water in their own homes. If they believe the milk supply is dangerous, they should have it pasteurized before giving it to the members of their own households. If they believe that from faultily disposed of sewage disease may be spread, they should have sanitary waterclosets or privies at their own homes. In short,

teach by deeds as well as words.

Such are some of the things which the mayor and city council can and should do in the prevention of typhoid fever. Summed up, just this: They can and should do their plain duty as city officials, as citizens, and as men.

And let no one suppose that this is a matter in which he has no personal interest. The duty itself we may evade, but we can never be sure of evading the penalties of its neglect. This disease not seldom attacks the rich, but it thrives most among the poor. But by reason of our common humanity we are all, whether rich or poor, more nearly related here than we are apt to think. The members of the great human family are, in fact, bound together by a thousand secret ties of whose existence the world in general little dreams; and he that was never yet connected with his poorer neighbor by deeds of charity or love may one day find, when it is too late, that he is connected with him by a bond which may bring them both, at once, to a common grave. (William Budd, Typhoid Fever, London, 1873.)

ORIGINAL CONTRIBUTIONS

THERAPETITIC NOTES—STATUS OF TUBERCULOSIS IN THE CITY OF ROSWELL.

C. M. Yates, M. D., Roswell, N. M.

The Pecos Valley, and Roswell in particular, has the reputation abroad of possessing a panacea for most all the ills to which human flesh is heir, tuberculosis in particular. As to whether or not this is a blessing to Roswell is not within the province of this paper: still, I am of the opinion that were it not for

this reputation, Roswell, today, would still be only a "cow-camp." As to whether or not Roswell deserves the reputation she has abroad is partly within the province of this paper. I believe that all will agree that a patient with tuberculosis has a longer lease of life, all things else equal, in a climate

which has the minimum of atmospheric humidity and a maximum of sunshine, and this country comes very near combining both. Then the conclusion is that Roswell deserves her reputation. From the best judgment I have, after a tolerably careful survey of the situation, consumptives of all stages are coming to Roswell in increasing numbers from year to year. Many, in a measure, regain their health, but it is a lamentable fact that far the greater number sooner or later succumb to the ravages of this dreadful disease. I felt sure that many who die in a few months after arriving here would have their lives prolonged materially were they financially able to provide themselves with medical treatment and the comforts necessary to improvement in health. I am of the opinion that not more than 25 per cent of all cases that come here are financially able to take the proper care of themselves, and not more than 25 per cent of those who are financially able to afford good attention make any permanent improvement. This small per cent of the whole, only about .06 to .4 per cent, that ever make any permanent improvement at all, is explained by the fact that the balance wait till they are beyond any hope before seeking a cure here. Strictly speaking, this all is not pertinent to my subject, though it leads up to it.

The status of tuberculosis in Roswell at this time is not ideal. One reason is, there is no place where consumptives can be taken care of properly. True, the hospital has a ward set apart for such cases, but it is a well known fact among doctors that practically only hopeless cases can be induced to enter an institution. They prefer to congregate in hotels, boarding-houses, and rooming-houses, where there is no earthly attempt at sanitation, to entering an institution where

every attention is given and where they would have the VERY BEST opportunity to get well. This is no "idle dream," but an actual fact which it cost me \$1,700.00 to learn. I have not forgotten the "Roswell Tent City." Today, consumptives may be found in every hotel, boarding-house and rooming-house in Roswell, in all stages of the disease from a few of the incipient cases to many in the advanced and far-advanced stages.

Not a day passes but we see people walking the streets coughing and expectorating promiscuously who ought to be in bed. The most of them come here with the advice "*Go to Roswell and when you are there take all the exercise you can and eat all the milk and eggs you can hold and stay away from doctors.*" The average doctor in the east does not seem to know "beans" about treating tuberculosis. If I desired to advise a patient how to conduct himself so as to end his life at the earliest possible moment without actual suicide this would be the advice I would give him.

Not only are the hotels and boarding-houses of the city hotbeds of tuberculosis, but many, very many private-houses are just as bad and many worse. In addition to those who come here alone there are those who bring the whole family when only one is afflicted. These rent houses, some buy, and keep house and thus are a menace only to the immediate family, in most cases. Still others erect tents at any place which they may be allowed and pretend to take the open air treatment, when in reality the average tent in Roswell is only a combination of every imaginable filth.

It was formerly thought that, owing to the climatic conditions which prevail, tuberculosis could not be contracted here. I think the most of you gentle-

ment will agree with me that this was a mistaken idea. To be sure, one is not so liable to contract the disease here as in localities where there is so much more humidity, and damp, rainy weather, but immunity cannot be claimed by a resident in Roswell. Personally, I can now call to mind two cases of tuberculosis which happened in my practice in people who were born and raised in Roswell and died with the disease. These were both Mexicans and of course their manner of living is ideal for contracting any communicable disease. Several years since, our city passed a "spitting ordinance" which was a step in the right direction, and, no doubt, does something in the way of preventing the spread of tuberculosis, though only in a limited way. The only benefit it bestows on the general public is this: people are not so apt to step on the sputum or ladies to drag their skirts in it and convey it into their homes. This is absolutely all the advantages I can see in the ordinance, and this advantage is quite desirable if only for cleanliness. The consumptive is allowed to spit anywhere except in a public building or on the sidewalk. He deposits his sputum on the streets, in the gutters, grass

lawns and indeed, anywhere except the two mentioned places. It dries and is carried hither and thither by the wind. I do not see that conditions show any marked improvement over those which took steps toward sanitation, so far as the subject under consideration is concerned.

Then, if I am right in my statements we have the following conclusions:

First—Roswell has a reputation as a health resort for consumptives, and deserves it.

Second—Consumptives have a longer lease on life here than in more humid atmospheres.

Fourth—They come in increasing numbers from year to year.

Fifth—About 25 per cent are financially able to take care of themselves.

Sixth—About .06 1-4 per cent of all cases regain their health.

Seventh—The status of tuberculosis in Roswell is not satisfactory.

Ninth—The prophylaxis now in force does not confer immunity.

Eighth—Residence in Roswell does not meet the indications.

Read before the C. C. M. S., Sept. 14, 1910.



MEDICAL ORGANIZATION AND ITS RESULTS.

By Dr. F. Palmer, Cerrillos, N. M.

Gentlemen of the Santa Fe County
Medical Society:

The opportunity is given me by your kind courtesy to present a theme, fraught with the greatest importance. The issues it deals with are not those involving directly, financial, commercial or manufacturing interests. Indirectly and necessarily it touches all these as "the nation's health is the nation's wealth." But far greater than all these as it deals with the radical principles of human life. Yet it is often the key note to the rise and fall of neighborhoods, countries, states and nations, as rightly directed it holds in its hands their prosperity and if neglected their decay and ultimate ruin. Human genius with its ripest and best powers of investigation can find no wider and more fruitful field of observation of human life. The avenues of research are stretching far out now and on broader lines, and the delvers in the mines are bringing out in the passing years, material that as a means to the end is forecasting still greater possibilities for the future. There are limitations that border on the spirit world and that can never be crossed by the finite mind, but until it reaches the blank wall of an absolute impossibility and the edict comes, "thus far shall thou go and no farther." the searchers must go on conquering difficulties and step by step throw light on that which has been dark and hidden. Into the crucible for destruction must

go all past theories and experiments that have not lightened the way to better things. From chaos must come order and from darkness light. Yet the traditions and practices of the past must not all be eliminated, the old must not needlessly be cast aside, because it is old, or the new received because it is new. On the building of the workers of the past through all the ages has been laid the superstructure on which we are now to build until the dawning day has reached its meridian splendor, and humanity reapes its acme of possible accomplishments, we are to work on until the millennial dawn shall wake the then living to a land of fruition where disease never enters and all pain and sorrow are banished forever. In order that a proper comprehension of my theme may be fully illustrated, it is my purpose to bring before you a historical sketch of the laws of New Mexico. In 1882 the first medical law was passed in this territory. That law has been added to as occasion in the passing years required, but the broad foundation has been the same. The governor of New Mexico shall appoint seven reputable physicians of known ability who shall constitute the New Mexico board of health and medical examiners. The members of said board shall meet in the City of Santa Fe, New Mexico, on the second Monday of January, April, July and October in each year. The said board, shall, upon the production of evidence satisfactory to

it, license, without examination, any reputable physician who is a graduate of a medical college in good standing and which has a standard as high as that required by the association of the American Medical College. Such board may grant license without examination to those applicants who have been regular licensed physicians in other states and territories, having qualifications and requirements equivalent to those required in New Mexico when such states and territories reciprocate with New Mexico. Such board shall also license reputable graduates of any college who are of good moral and professional character and conduct, and who have taken a six months' post-graduate course or who shall have three or more years of actual practice, provided the applicant passes a satisfactory examination before the medical board. Such applicant must make an average of 75 per cent and 50 per cent must be attained in any one subject. The board will allow any applicant who fails to pass a satisfactory examination, another examination at its regular meeting. Every person holding a certificate of said board of health shall have the same recorded in the probate clerk's office wherein the practitioner resides: It shall be the duty of said board to annul any license to practice upon satisfactory proof of said board that the holder of a certificate has been guilty of dishonorable or unprofessional conduct. The board of health shall make such regulations respecting nuisances, source of filth, and cause of sickness applicable to any city, town or village

in the territory. When any disease dangerous to the public health is found to exist in any part of the territory the board shall use all possible care to quarantine and prevent the spreading of such infectious disease, whenever any physician or other person knows that any person is sick with any contagious or infectious disease or any nuisance dangerous to the public health he shall give notice at once to the health officer or justice of the peace, who shall at once notify the county health officer, and it becomes his imperative duty to see promptly to its abatement. The county health officer has special supervision over the sanitary condition of public schools, hospitals, opera houses, court houses, jails, prisoners, public slaughter pens, depot and passenger cars on all lines of railroads in his territory. In 1903 the territory legislature passed a law governing the practice of osteopathy in New Mexico. The governor shall appoint three legally qualified osteopathic physicians who shall constitute a board known as the Board of Osteopathy. Said board shall hold meetings twice a year in the city of Santa Fe and license to practice osteopathy all qualified applicants. It shall be the duty of each member of the board present to submit written questions in examination on each subject and such other oral questions as he may see fit. The board will reciprocate with all state osteopathic boards whose requirements are equal and who will reciprocate with this board, providing, however, that the applicant has practiced two years in the state under which he holds

such certificate. The person receiving a certificate to practice osteopathy shall have same recorded in the office of the probate court of the county in which he intends to practice. The said board shall have power to revoke the license of any practitioner of osteopathy who is guilty of immoral or unprofessional conduct. In 1893 the territory legislature passed an act creating a board of dental examiners to regulate the practice of dentistry in this territory. The governor shall appoint five practicing dentists in the territory who shall constitute the board of Dental Examiners. The board shall meet at least once a year and at such times and places as it deems necessary. The board shall license to practice dentistry all applicants who shall pass a satisfactory examination before the board providing the applicant presents his diploma at the time of his examination from a reputable dental college. Said board shall revoke the license of any person who holds a license to practice dentistry in this territory who is found guilty of immoral or unprofessional conduct. Being in possession of all the documentary evidence bearing upon this subject and having given it a very careful examination and investigation, it is my purpose to commend it to you as a system superior to the systems of many states. It wields all classes of practitioners as obedient to the same common law of requirements, and yet at the same time at least not interfere with the liberty of any man to practice that most appeals to him, or all, if he so chooses, for in these days a man must

not circumscribe his boundaries to such an extent that he cannot avail himself of any legitimate means of resource. Organization serves also the end of mental attrition for scientific study and its results should not be shut up to the individual, but should be interchanged for the benefit not alone of other physicians, but that through them it may reach out and compass the welfare of many. Every man is a debtor to his fellowman, whatever his calling may be, and so should it especially be with us who deal with the woes and sorrows of humanity. As the lighthouse with its beacon tower sheds its light far out at sea to welcome the belated and storm tossed mariner safely to port and his loved ones, so by these means of associated fellowship in society contact, each man can and should become a torch to illuminate the path way of the sufferer to health and happiness. No matter what the grade of ability may be no man's experience who has practiced medicine for several years is so limited that it may not be worth while in some of its details to the most profound and learned scientist. All men are made better and wiser by the law of friendly and genial contact on lines where they touch. Their eyes become opened to their own weak points and infirmities, and this process of discipline sometimes hard and carrosive, serves in the end to refine the metal and fit it for the better use in the stress of his daily calling. The bearing of the ethics is a matter of vast importance in the mutual relation and necessary contact of physicians. There are three classes of

men in the world: Those who will always do the right, because they instinctively know what it is; another class is willing to do the right if they are properly instructed, but left to themselves are often unable to know what is the proper course to pursue; still another set is found, and they will not act in accordance with what is ethical and right, even if acquainted with it; social pharisees, for whom there is little or no hope. The proper construction of

observance leads to harmony, uprightness and peace. The whole subject is almost inexhaustible, and a volume might be written to show its various bearing as yet untouched, but time will not permit me to dwell further on that which I trust may prove to be instructive and lead to the future development of a larger interest in this most important subject.

Read before the Santa Fe County Medical Society, May 26, 1910.

ARTIFICIAL FEEDING OF INFANTS

M. K. Wylder, M. D., Albuquerque.

No more frequent nor puzzling question confronts the busy doctor than the one we are to discuss this evening, and while I do not even hope to add one new idea to the vast store of scientific information on this subject, I do hope that by going over the subject together we may be able to make some practical application of the means at our command and return to our work with refreshed memories better armed than before.

How shall I feed this baby? is a question every one of us has to answer almost daily, and very often after outlining our plan of feeding, we have to back up and pursue another, and another, and yet another course before we hit upon the right one, and the unfortunate part of it is that in far too many cases we never hit upon the right course, and if we stop to consider the large percentage of deaths among infants arising from gastro enteric trou-

ble, argument is not necessary to convince us that more thought should be given to this subject. Fortunate indeed is the baby whose mother is able to furnish her own supply of lacteal fluid, but in this sweet age of advanced civilization and enlightenment this type of a mother, like the noble Red Man is becoming extinct; however I never give up to artificial feeding, when the mother is healthy, without first exhausting all of my resources to increase the supply of milk.

The ideal foundation for our babies' food is cow's milk, however this must be modified to suit the age and temperament of the baby. I always begin by making the milk weaker than a child of that age should take and then I gradually increase. Cow's milk must be brought to duplicate as nearly as possible the milk of the mother. Let us go briefly over the differences between cow's milk and mother's milk:

The Casein of mothers' milk forms a light flocculent clot on coagulation which is easily digested and assimilated. The casein of unmodified cow's milk on coagulation form tough heavy curds which will cause constipation, indigestion and nervousness. Casein is also present in cow's milk in much too large proportion to be digested in the infant's stomach, while on the other hand mothers' milk contains more sugar than is found in cows' milk and mothers' milk is alkaline while cows' milk tho it may be alkaline when perfectly fresh, very soon becomes acid; therefore if we reduce the percentage of proteides by addition of water we also reduce the already too low percentage of sugar, and this dilution of cows' milk diminishes the percentage of fat. This can be overcome by the addition of cream or top milk, then what we have to do is to reduce the casein, render the milk alkaline and increase the fats and sugars. I will not take up your time with a long list of formulas from infancy and infinitum, but will state that I prefer potassium bi-carbonate for rendering the milk alkaline, realizing that better men than I prefer lime water; yet it seems to me that lime water is more constipating than the potash salts, and an analysis of the ash of mothers' milk shows that it contains a much larger percentage of potash than that of lime salts.

Of course when access can be had to a first class milk laboratory and it is possible to have a modified milk prepared with the exact percentages of fats, proteids, sugars and salts that are de-

sired, these combined with scrupulous cleanliness as is possible now in most of our large cities, the physician has little to do but to write his prescription, but in dealing with the average mother who does not realize the importance of care in feeding her child and thinks that even scalding the milk bottles and nipples with an alkaline solution is an unnecessary procedure, you might as well ask her to fly as tell her to combine the proper percentages of cream, milk, top-milk and sugar with the proper amount of mineral salts, etc., and expect her to fix it up as it should be.

Also in these days of tubercular cows and tubercular dairy help together with the facts that so many things affect the cows' milk such as wandering off into a far corner of the pasture and eating weeds, going too long without water, being tormented or frightened by various causes, drinking stagnant water in a mud hole,—all of these things will tell in the milk and the baby may suffer with colic, nausea or whatnot as the result, yet if you can get the milk of a healthy cow that has been properly cared for you have the nearest possible approach to mothers' milk. Some babies are blessed with stomachs that can stand almost any kind of abuse and will take whole unmodified cows' milk and thrive on it, however these babies are rare. Personally, I prefer to combine top-milk with some of the prepared foods where a good milk can be procured, but where a good milk cannot be secured I believe the condensed milk with one of the prepared foods is preferable to a questionable supply of cows'

milk, and one thing in favor of condensed milk is its uniformity, for no matter how reliable your supply of cows' milk, it will always vary a little from day to day in quality. I have had the best success by combining fresh milk with malted milk, and have had some cases that could not take cows' milk at all that did fine on a combination of condensed milk with malted milk, but each case is a study and a law unto itself, and we simply have to experiment till we find the food that agrees with each baby, and having once found it, stick to it religiously and increase with great caution.

'Tis my belief that we fail more often on lack of attention to detail than to getting the right combination of foods; for instance, the necessity of scalding and scrubbing the nursing bottles with a solution of baking soda; of the care

of the nipples, of keeping the milk and other ingredients free from all contamination; of impressing upon the mother and nurse the importance of giving the baby the bottle and taking it away as soon as the baby stops nursing. Serious digestive disturbances have arisen from no greater source than that of giving the baby the bottle, letting it take perhaps a small amount on going to sleep, on awakening allowing it to finish the same bottle which in the meantime has soured, and this method of feeding very often is the finish of the baby. My hope is that this paper may set us thinking, and that we may do something to check this great number of deaths among our little folk arising from gastro Enteric sources, and while we are hearing so much about "Race Suicide," let us see if we cannot do something to check "Race Waste."



The New Mexico Medical Journal

Volume V.

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Number 12

EDITORIAL

PROVISIONAL PROGRAM

Program of Promised Papers For the Section of Practice of The New Mexico Medical Society For the Meeting to Be Held in Albuquerque, September 29-Oct. 1.

(These papers are not in the order in which they will appear on the regular program. A portion of one day—probably an afternoon will be devoted entirely to the tubercular subjects under the leadership of the members of the Society for the Study and Prevention of Tuberculosis.)

SECTION OF MEDICINE

Oration on Medicine—R. E. McBride, Las Cruces.

Diagnosis of Gastric Carcinoma—E. C. Prentiss, El Paso.

Congenital Mitral Regurgitation—J. R. Gilbert, Alamogordo.

Preventive Medicine in the Southwest; Its Aims and Limitations—Jno. W. Flinn, Prescott.

Modern Practice—M. D. Welsh, Pena Blanca.

Our Mind and the Patient's in Disease—J. R. Howell, Tularosa.

Veneral Disease and its Transmission—P. Worley, Clovis.

The Importance of Diagnosis—Jno. R. Calloway, Mescalero.

Review of Some Recent Ideas of Some Old Disease—E. T. Wilkinson, Texico.

A Few Useful Remedies—A. L. Dillon, Clovis.

Acute Rheumatism—S. G. Von Alman, Clovis.

The Physician as an Advertising Medium—A. H. Abernathy, Clovis.

The Country Doctor—J. W. Long, Tularosa.

Etiology of Rheumatic Fever—W. G. Hope, Albuquerque.

Title not supplied—G. W. Harrison, Albuquerque.

Title not supplied—T. C. Sexton, Las Cruces.

Business Methods in the Practice of Medicine—R. J. Thompson, Tucumcari.

Body Temperatures, What They Mean and How to Regulate Them—S. A. Milliken, Silver City.

The Skin in Health and Disease—S. A. Milliken, Silver City.

Obstetrics—C. D. Ottosen, Willard.

SYMPOSIUM TUBERCULOSIS

Papers Promised For the Symposium on Tuberculosis to Be Held as a Part of the Work of the Section on Medicine.

Oration on Tuberculosis, "One Year's Progress in our Knowledge of Tuberculosis"—F. T. B. Fest, Las Vegas.

Education in Relation to Treatment

of Tuberculosis—Evelyn Frisbie, Wagon Mound.

Early Diagnosis of Tuberculosis—L. A. Dickman, Clovis.

The Therapeutic Value of Altitude in Tuberculosis—S. G. Sewell, Albuquerque.

The Climate of the Southwest in Relation to Tuberculosis—W. R. Saltzgaber, Alamogordo.

Some Observations on Diet in Tuberculosis—L. S. Peters, Silver City.

Climate—J. W. Lewis, Lincoln.

Public Control of Tuberculosis and Other Contagious or Infectious Diseases—A. L. Burton, Albuquerque.

SECTION OF SURGERY

Oration on Surgery, Surgical Progress of the Past Year—J. W. Colbert, Albuquerque.

Some Cases of Intestinal Obstruction—Jas. Vance, El Paso.

Antisepsis—W. A. Parvis, Socorro.

Treatment of Wounds—F. de la Vergne, Albuquerque.

Diagnosis of Surgical Affections of The Upper Right Quadrant of the Abdomen—Robert Smart, Albuquerque.

Fracture of the Base of the Skull—Report of Cases—B. S. Stevens, El Paso.

Report of Case of Traumatic Epilepsy, With Presentation of Patient—M. K. Wylder, Albuquerque.

United Fractures—A. W. Morton, San Francisco, Cal.

Title not supplied—T. P. Kaster, Topeka.

Title not supplied—J. H. Wroth, Albuquerque.

SECTION ON SPECIALTIES

Report of Case of Syphiloma of the Brain Simulating Brain Abscess of Otitic Origin—C. S. Losey, Las Vegas.

Mastoid Operation—R. G. Davenport, Trinidad.

RATES, ATTENTION!

The rate will be *one fare and one-fifth* on the certificate plan. When buying your ticket to Albuquerque obtain a receipt, if at least fifty receipts are presented in Albuquerque the return fare will be only one fifth.

BANQUET

On the second night the banquet will be held at the Alvarado Hotel. Price per plate will be three dollars. The following toasts have been decided on:

"The New Mexico Medical Association."

"The Profession."

"The Board of Medical Examiners."

"The County Society."

"Our Guests."

"The Ladies."

"Medical Legislation For the New State."

"Reminiscences."

These toasts will be scattered and a request will be made of doctors in different parts of the Territory to respond. The time for the toasts will be limited to five minutes each.

THE OPTOMETRY NUISANCE AND THE A. M. A. RESOLUTIONS.

The House of Delegates of the A. M. E. in St. Louis has shown the way. Our Committee on Legislation cannot but be guided by those resolutions, especially that part which we reproduce in italics. If the resolutions express the true statement of affairs then only one way is open: To enact such legislation within our society to make it impossible for any member in good standing to serve on the Board of Optometry; furthermore it will be the duty of our Committee on Legislation to procure such legislation which will do away with the nuisance and menace to the public.

This section on Ophthalmology of the American Medical Association has put itself on record as declaring that refracting of human eyes is an important part of medical practice and recommends that every general practitioner should have the training in ophthalmology which will enable him to manage infectious diseases of the eye and its refractive defects. In a series of resolutions to the House of Delegates of the American Medical Association the Council on Medical Education is requested to arrange a curriculum able to equip medical students with such training, and recommends medical colleges to adopt the same. The action of state registration boards now requiring such training for license is given approval and other registration boards are advised to adopt like measures.

Concerning the question of so-called optometry the section on Ophthalmology presented the following resolutions:

"Whereas, In many states examining boards of optometrists have been legalized and are assuming in their examinations of students prerogatives of

the medical profession; and

"Whereas, In a number of states either the governor or the board of medical examiners has appointed ophthalmologists to serve with opticians in examining candidates for license in the mechanical examination of the eyes (so-called optometry); and

Whereas, Such affiliations on the part of medical men are practically endorsements of the optician's claim that laymen without medical education are capable of prescribing for errors or refraction; and

Whereas, These underlying ocular defects can only be diagnosed and corrected by the educated physician, who can appreciate this special work, by functional and objective examination; and

Whereas, This matter assumes importance because in many states the examining optician without medical training or responsibility is seeking legal authority to make diagnosis of and prescribe for ocular defects; there, be it

Resolved, That the Section on Ophthalmology of the American Medical Association memorializes its House of Delegates with the following petition:

The section prays: that the House of Delegates express its disapproval of ophthalmologists serving with opticians on boards examining men who have not taken medical courses endorsed by the Association of American Medical Colleges and considers the acceptance of such appointment by ophthalmologists as contrary to the spirit of the code of ethics of the American Medical Association.

That the House of Delegates urge on all members of the American Medical Association, first, that legal recog-

nition of the optician to diagnose the condition of the eye is an infringement on medical practice laws, and therefore should not be sanctioned by any state or institutions; second, that referring patients to opticians by a physician should be deprecated because it is not only exposing them to the risk of insuring, but is aiding and abetting men who have no medical education in their acknowledged and open efforts to enter on an important field of special medical practice.

Furthermore, the House of Dele-

gates is memorialized to request the American Medical Association to publish a history of so-called optometry and optometry colleges, and that such pamphlet be sent to officials of state medical societies and medical men interested in defeating the efforts of these men to enter the medical profession by false pretenses.

The resolutions include the recommendation for the appointment of a committee of two, who are members of the Section on Ophthalmology, to furnish the necessary data.

OPTOMETRY IN ITS TRUE LIGHT

The State of Ohio restricts the practice of medicine to physicians. Like everywhere else traders in part of the medical practice like to be recognized. They like to acquire by legislation what the legitimate practitioner can obtain only by study. The opticians in Ohio united themselves to be legislated into a body of men capable of exercising certain part of medicine. The physicians objected; the governor of Ohio vetoed the bill. In consequence the good optician showed their true colors by affiliating themselves openly with the traffickers of murderous patent medicines in opposing one of our country's greatest needs, a Federal Bureau of Health, by the following resolution:

"Whereas, Governor Harmon, of the great State of Ohio, having admitted to the representatives of the Ohio Optometrical Association that he knew nothing either of the practice of medicine or optometry, or of the merits of the proposed optometry law; and

"Whereas, Having violated his

promise to hear the advocates of the bill, vetoed said bill and incorporated in his veto statement a verbatim reproduction of the address of the representative of the Ohio State Medical Association delivered before the Senate Committee appointed to consider said bill; and

"Whereas, By said veto stateemnt arrogated to himself dictatorial powers not contemplated by the prerogatives of his office, by assuming those of supreme judge and jury; therefore, be it

"Resolved, That the Ohio Optical Association, in annual convention assembled, condemn his action as being diametrically opposed to the rights of free-born American citizens."

A resolution was also adopted, opposing the so-called "national medical trust." It reads as follows:

"Resolved, That the Ohio Optical Association vigorously disapproves of the movement for a medical monopoly contemplated by the National Health Bureau Bill now pending in Congress, and that it extends its moral support to all organizations engaged in research which has for its purpose alleviation of human suffering."

QUACK.

In the June number of the *Journal* there appeared an article on "What is a Quack?" which goes fairly well into the subject. The original meaning of the verb "quack" is, "to croak." Webster defines it as "to boast," "to talk noisily and ostentatiously." "Quack"; "A boaster, one who pretends to skill or knowledge which he does not possess."

The article referred to not only covers this definition but goes farther into the subject. Webster lived in quite a remote past, as did Solomon, and were they living in this day and time no doubt both would, in a measure, revise their writings. We see so much quackery in the profession of medicine by men who are competent practitioners that it is almost enough to disgust those who hold in reverence the high ideals of ethics that animated our forefathers. Imagine one of the "Old Time" physicians resorting to the tactics of the modern "quack." "Had I been called earlier"; "I was called just in the nick of time"; "But few doctors understand this disease"; "In all my extensive practice I have never lost a case of this disease" etc., etc., ad nauseam.

The original meaning of a "quack" would confine up to the "ignorant pretender", but modern usage makes it apply to any one who boasts of either assumed or real qualities or results. A

quack now-a-days would not necessarily be simply "a boastful, ignorant pretender," though we always class them as such. The old time quack confined himself to "blowing his horn" to the laity. The modern quack does not stop here but invades our medical societies, reads papers and discusses medical subjects in a manner to impress those not better informed with the fact that he is a wonderful physician and surgeon and even rivals Esculapius. He uses high-sounding terms that if stewed down mean but little, all this endeavoring to impress the profession with his superior ability. He reports imaginary cases and surgical operations that he never saw, and gives such an array of statistics with successful results as to completely astound the credulous. This is the worst kind of a quack. One who will make false statements in reporting cases should be ostracised by the reputable medical society. This modern quack does not stop here. He often invades medical journalism and frequently we see him sitting high in the medical councils of the government.

Give me the "old time doctor" who studies his cases, gives them quiet, unostentatious attention and if there is any "blowing" to be done he lets the people he serves so well do it and that not at his solicitation. —Y.

THE DUTCH LUNCH, A "FATA MORGANA."

This is the name of a special entertainment provided for by the committee in charge, headed by H. B. Kauffmann. The name is rather misleading, the affair itself will leave no doubt about its nature and the proper name

can be selected by initiative and referendum after it is over.

It may be that the committee calls it a Fata Morgana because the true objects of a real Dutch Lunch may appear more or less illusory and not as

concrete and tangible as the Dutchmen prefer for their subjective needs and desires. On the other hand, it is hardly credible that our dear colleagues would expose their morgantic affairs, or that the visitor would be treated to the sight of swift-footed morgans, or that old Pierpont M. would honor himself by inviting this learned body to a Dutch Handout. We understand that a fairy-dance will be insinuated and, it may be, her name is this time Morgan? Quien sabe?

The place has not been found. A sub-committee is engaged hunting for an oasis in the desert of Albuquerque. It must not be too far away else the medicines in bottles and pots might evaporate and change the standard of humidity. In connection with the linguistic part of the affair refreshments will be served under the auspices of the W. T. A. Mrs. Kauffmann will have charge of the serving of iced tea and lemonade. This will be filtered by a special and secret process to make sure that none of the sugar used in the compounding has been converted into alcohol. Dr. Kauffmann's lovely daughters will have charge of the eatable-stomach fillers. There will be deodorized limburger and bleached rye-bread. The frankfurters will be decorated at both ends with colored ribbons and each one is certified by the local temperance club to be absolutely thirstproof. The sauerkraut is on the way from the laboratories of the A. M. A. chemists where it undergoes a thorough process of sterilization. The mustard will be treated to free it from

its nasty volatile, beer-affinating oil. As the majority of the guests prefers the real dutch goods the ladies will serve also iced Boiled New England Dinner and a variety of German pies and other teutonic delicacies.

None of the guests being smokers the mosquitoes and flies will be fought by fine sprays of oil of wintergreen and kerosene in its most soothing form. Hot air will be furnished in sealed cans, stored since the last convention. The cans will be heated before distribution to make sure that the least offensive gas has been removed and the chastity of the modest medico remain unshocked.

To stimulate the aesthetic and ethic sense of the attendants, to uplift their minds from all things sensual, a real religious oriental dance will be imported. Not of the nature as sprung on the A. M. A. in St. Louis. This feature is not quite certain because a maiden could not be found, which would import the dance properly. Another special committee is searching industriously for her at present. The dress of the maiden will not be as indecent as in St. Louis, where she wore a garter. Not to hurt our feelings she will wear a flower in the hair. To make the demonstration more paradisaical an apron of fig leaves will be worn, reflected upon the maiden by a spot light. The wives and mother-in-laws of the members of the committee insisted on this feature because they do not want a repetition of the outrage committed in St. Louis and prevent any gray-headed doctor from removing that garment of modesty.

PROPOSED AMENDMENT TO CONSTITUTION AND BY-LAWS

Changes and amendments in constitution or by-laws are always an important matter and we repeat those those which were offered at last convention in order that the delegates have opportunity to consult with their societies about the stand to be taken by them.

"1. Amend Article 6 of the Constitution, by striking out the words 'ex-officio' after the words 'President and Secretary.'

"2. Amend the By-Laws, Chapter 5, Page 9, by adding the following: In the cases of absence from regular meetings of any of the Councilors the House of Delegates shall elect a member of the Society from the respective district and who is present at session to serve until successor is elected. This amendment to take effect beginning with the year 1910."

A resolution had been offered and accepted that the president and secretary have a vote in the meetings of the Council of which they were "ex-officio" members so far.

There has been some criticism amongst the members about the phraseology of the above amendment regarding part 2, but these technicalities can be overcome if the amendment is put to vote at once and the Councilmen elected after the vote has been taken and the Society approved of the action.

Article 9, Section 2, of the Constitution, which reads "Amend Article 9, Section 1, by striking out the word 'three' and inserting the word 'seven.'

"Amend Article 9, Section 2, by striking out all that portion of said section referring to terms of Councilors and inserting the following: 'The

terms of Councilors shall be three years. Those first elected serving as follows: Two for one year, two for two years and three for three years, as may be arranged, so that after the first election, two shall be elected annually, for a term of three years and each third election, three shall be elected for a term of three years.' "

Amendment to Article 4, Section 2, of the Constitution, by striking out the word 'regular' before the words 'Medical School.' "

This amendment will allow graduates of so-called "not regular schools" to join our ranks. We welcome every regular practitioner, licensed according to our laws and a member of the local society, without regard to school of graduation and sectarian principle of the same. What we ought to insist upon is the demand that each member be a regular practitioner who uses no specific school or system, who just practices scientific medicine and makes a pledge to the effect that his system of treatment will be scientific medicine and nothing else. If such a colleague would make use of the fact that his alma mater nursed him with homeopathic or eclectic milk and uses this fact to cater to a weakminded public, which wants a name and not medicine, then his conduct is unbecoming of a gentleman and we have to banish him from our membership.

Another proposed amendment is this:

That part of the by-laws which reads "delegates shall not be eligible for election to any offices named in the constitution, except that of councilor" be changed to read thus:

"Delegates shall not be eligible for the office of President."

NURSES, HOSPITALS AND SANATORIA

Each of us was hampered at some time through the circumstance that this territory has no provision whatsoever for the registration of nurses. We recognize the fact that a nurse who thinks she is fourth fifth of a M. D. is a sad nuisance. She is a danger. A well-trained nurse, who knows her business, who keeps her place and does her duty is a modern institution of untold benefit; she is an actual need.

We have no laws regarding nurses but that would not prevent us from starting a system of registry of our own, appoint a committee to that effect and make it the duty of that committee to keep a register of all trained nurses, according to a system of rules to be adopted by it and such register shall be published in the Journal and changed whenever necessary.

We often have to recommend patients to other cities and suggest some hospital or sanatorium. It would be a

wise plan to instruct that very committee to make a list of all ethical institutions, their terms and management. This will be of a great help and will avoid our support of unworthy institutions. We would consider only as "ethical" institutions such where irregulars and quacks are barred, where no fake systems are recommended, where ethical nurses are employed. Institutions, which advertise doubtfully, which are in charge of men outside of "good-standing" and where men are favored hostile to the profession and its high purposes shall be barred. It is hardly possible for a medical man to be high in his profession and be separate from the rest; at the same time this is an anomaly and shows that there is something wrong somewhere. Today membership in our body and good-standing are inseparable and those who separate themselves ought to be treated accordingly.

SUGGESTIONS IN REGARD TO THE JOURNAL.

Suggestions in regard to the journal

It is self-understood that, by resolution or otherwise, steps must be taken to bring the management of this Journal strictly within the Postal Laws and Regulations. The authorities have been enforcing the regulations and the the Council decided to allow a course which is in harmony with the said regulations and which fact has lead to some trifle misunderstanding.

A State Journal, and such we will be soon, must keep the membership in touch with each other, therefore it will be necessary that a resolution be introduced making it a duty of the officers of all constituent societies to report faithfully all doings and happenings of interest for the profession to the editor. It must become their duty

that each meeting is reported in abstract and that the papers be published in the Journal. This will have the consequence that we will do more work in the societies and that we will do better work. It will be a strong stimulus for the interesses of the whole society. The present system was of great disadvantage to the editor and the product of a handicapped mind cannot be as good as it would be otherwise.

Under the present management there was period of decadence and our existence seemed problematic. But this has changed, the Journal, now a monthly, has been made possible and it ought to be the intent of every member of the organized profession in New Mexico to make its official organ worthy of existence and something to be proud of.

SELECTED ARTICLE

THE OWEN BILL FOR THE ESTABLISHMENT OF A FEDERAL DEPARTMENT OF HEALTH AND ITS APPOINTMENTS

By S. Adolphus Knopf, M. D., Professor of Physio-Therapy at the Post-Graduate Medical School and Hospital, New York.

Anyone who is familiar with the workings of governmental departments of health such as exist abroad, who has seen or experienced the sanitary benefits bestowed upon the people by the Reichs-Gesundheitsamt of Germany (Imperial Department of Health), the Conseil Supérieur de Santé Publique de France, and the similar institutions of most European governments, cannot help feeling amazed that any opposition should exist to the establishment of a federal department of health in this country. This amazement becomes all the greater when one considers some of the elements of which the opposition to that measure is composed. There is, for example, the New York Herald, a large and influential newspaper with an honorable career and a brilliant record for advocating everything that is conducive to the public welfare. Only in this particular instance has it allowed itself to become the mouthpiece of principles to which it is in general opposed, that is to say, principles and measures whereby the good of the people at large and the progress and welfare of mankind are hindered, and the lives of individual American citizens endangered. This particular newspaper is independent of any political party, or professional or religious association which might prejudice its point of view, and still it opposes a measure whereby all citizens of the country would benefit. The writer cannot help thinking that this powerful news organ has not informed it-

self thoroughly of the real purpose and function of a federal department of health, and in its attack upon a large body of men such as compose the American Medical Association, the American Public Health Association, the National Association for the Study and Prevention of Tuberculosis, the American Association for the Advancement of Science, and the various medical academies of the country, it is certainly misguided. It is to be hoped that the distinguished editors of the New York Herald will soon see that in their attitude toward the Owen Bill they are not on the side of the people but are working against the welfare and interests of the masses.

The principle of the Owen Bill, establishing a Department of Health, has been endorsed by the President of the United States, by General George M. Sternberg, Surgeon General of the Army (Retired) and Rear-Admiral Charles W. Stokes, Surgeon General of the Navy, by General Walter Wyman of the Public Health and Marine Hospital Service, by Dr. Harvey W. Wiley of the Bureau of Chemistry, by Governors of States, by the Conference of State and Territorial Boards of Health, by the United Mine Workers of America, by the National Grange, by the Republican and Democratic platforms, and by numerous other organizations.

What is the principle of this bill which is advocated by thousands of men trained in medicine or sanitary

science and interested in the public welfare?

Section 7, which embodies the main purpose of the Owen Bill, reads as follows: "That it shall be the duty and province of such a Department of Public Health to supervise all matters within the control of the Federal Government relating to public health and to diseases of animal life."

Section 2, of this bill deals with the unification under a Secretary of Public Health of the various agencies now existing which affect the medical, surgical, biological, or sanitary service.

There has recently been formed an organization which calls itself "The National League for Medical Freedom." It has for its purpose to combat the Owen Bill: it is opposed to the establishment of a Federal Department or Bureau of Health. The name of this organization is certainly, if not intentionally, misleading. It cannot claim to battle for medical freedom, for there is not a word in the entire bill which could be interpreted as limiting the practice of medicine to any particular school. Their claim that the establishment of such a bureau of health would have any resemblance to a medical trust is entirely unfounded.

The life insurance and industrial insurance companies which advocate this bill certainly have no desire to limit medical freedom or to repress any system which offers the chance of lengthening human life. These companies do not favor medical partisanship, and their sole interest is to prolong the lives of their policy-holders by whatever means possible. Their actuaries state specifically that they believe human life could and would be lengthened by the establishment of a Federal Department of Health.

Lee K. Frankel, Ph. D., representing the Metropolitan Life Insurance Co., is a member of the Committee of One

Hundred, appointed by the American Association for the Advancement of Science to further the propaganda for the establishment of such a department. Neither the above mentioned great newspaper nor any of the leading spirits of the "National League for Medical Freedom," of whom, I regret to say, have allowed themselves to ascribe the worst motives to the members of the committee, will deny that the names of the officers of this committee show that it is thoroughly representative of the highest type of American citizenship. The officers of the Committee of One Hundred are:

President—Irving Fisher, Ph. D., Professor of Political Economy of Yale University.

Secretary—Edward T. Devine, Ph. D., LL. D., Professor of Social Economy, Columbia University, and Secretary of the New York Charity Organization Society.

Vice-Presidents are:

Rev. Lyman Abbott, D. D., LL. D., Emeritus Pastor of Plymouth Church, Editor of The Outlook.

Jane Adams, A. M., LL. D., Founder and Headworker of the Hull House Settlement; Ex-President of the National Conference of Charities and Correction.

Felix Adler, Ph. D., Professor of Political and Social Ethics, Columbia University; Leader of the N. Y. Society for Ethical Culture.

James B. Angell, A. M., LL. D., Professor of Modern Languages and Literature and President Emeritus of the University of Michigan.

Joseph H. Choate, LL. D., D. C. L. (Oxford), Diplomat and United States Senator.

Charles W. Eliot, A. M., LL. D., President Emeritus of the University of Harvard.

Rt. Rev. John Ireland, LL. D., Archbishop of St. Paul.

Ben B. Lindsey, Judge, Reformer and Author, Denver, Colo.

John Mitchell, President of the Johns Hopkins University.

Wm. H. Welch, M. D., LL. D., Professor of Pathological Anatomy, Johns Hopkins University.

Need I say anything in defense of the Committee of One Hundred after having given the names of its officers?

Direct and most unkind comments, not to use a stronger term, have been directed especially against one vice-president of the Committee representing the medical profession. I refer to Dr. Wm. H. Welch, M. D., LL. D., President of the American Medical Association. Those who know Dr. Welch and even those who only know of him, would justly think it absurd if I should see the need to say even a word in defense of this master of medical science. To us it is indeed difficult to understand that there could be any man or woman in this land capable of speaking ill of Dr. Welch. There is no name in the medical world which is more honored in this country and abroad, no medical teacher more admired, no one who has a larger following than this John Hopkins professor of pathology, and no physician more beloved and looked up to as representing all that is best and noblest in the profession than Dr. Welch. If there is any man in the American medical profession who is unselfishly devoting his high intelligence, his time, and his means to the public welfare, it is Dr. Welch. Gladly do we acknowledge him as our leader.

To accuse the president and members of the American Medical Association of selfish motives is advocating the establishment of a Federal Department of Health is absurd. If there ever was an unselfish movement inaugurated, it is this one. It is a move-

ment by physicians for the reduction of disease which *ipso facto* means a movement against their financial interests.

The writer is a member of the regular profession; he nevertheless would not wish for a moment to limit the freedom of any citizen to choose his physician from some other school or cult, providing the individual assuming the function and responsibilities of a physician had the training necessary to prevent him from endangering the life of his patient by lack of medical knowledge or skill.

The official mouthpiece of this "National League for Medical Freedom" is Mr. B. O. Flower who had heretofore the reputation of a fighter for everything involving the spiritual, social, and physical progress of humanity, and it is inexplicable to many of his admirers how he can lead a movement opposed to the improvement of the health of the nation. The vast majority in the ranks of this so-called "League," though they may be well meaning, noble, and earnest, are not men and women who have toiled patiently for years in order to acquire the thorough scientific medical training which enables one to assume that great responsibility of the care and treatment of the sick. They are unable to appreciate the inestimable value of federal help in preventing disease. These people are blindly following certain individuals who designate the regular profession as a medical trust, and accuse the thousands of noble men and women who are devoting their lives to the alleviation of human ills of a desire to monopolize medical practice. The establishment of a federal department of health would mean pure food, pure medicine, control of plagues and epidemics, the advancement of medical science and through it the improvement of the health and increase of

material wealth of the nation. It is said that many of the individuals opposing the Owen Bill are commercially interested in the manufacture of drugs or patent medicines, of which latter the American people swallow about \$200,000,00 worth annually. Whether it is true or not that the National League for Medical Freedom is backed financially by drug manufacturers and patent medicine concerns, I am not prepared to say; yet even these men have nothing to fear from a Federal Department of Health if the drugs they put on the market are pure and the claims made for patent medicines do not delude the public or endanger its health. The element which clamors most loudly for medical freedom is composed in many instances of men and women who have attended one or two courses of lectures or got their "degrees" without any training at all, and have developed into "doctors" and "healers" in a most remarkably short space of time.

Because the American Medical Association has always advocated a thorough medical education, is pleading constantly for pure drugs, is opposed to quackery, patent medicines and nostrums, its 40,000 members are considered a medical trust. Yet it is in the ranks of this very American Medical Association that are found the greatest number of unselfish devotees to preventive and curative medicines. It is among this association that are found the men who have added the greatest glory to the medical and scientific reputation of this country. America's greatest surgeons—Marion Sims, Gross, Sayer, O'Dwyer, Bull, Senn, were members of this association. McBurney, Jacobi, Stephen Smith, Welch, Osler, and Trudeau have graced this association by their membership for nearly half a century. The heroes in the combat against yellow fever—Reed, Lazare and the

hundreds of others who have devoted their best energies and knowledge and often sacrificed their lives for the sake of medical science, were members of the American Medical Association.

One of the most illustrious members of the American Medical Association is its former president, Col. William C. Gorgas, of the U. S. Army, Chief Sanitary Officer at Panama, an adherent to the regular school. It is thanks to the genius, the scientific and thorough medical training of Dr. Gorgas that the formerly deadly Isthmus of Panama has now become as sanitary a region as any. A great patriotic enterprise, important to commerce and the welfare of nations, was made possible by this man. He has labored and is constantly laboring for the establishment of a federal department of health because he knows the inestimable benefit which such a department would bestow upon the nation.

Whatever advance has been made in medical science in America or in Europe has been made by scientifically trained men or by physicians not without but within the ranks of the regular profession. The greatest benefactors of mankind are those who diminish disease by prevention and cure. As another illustrious example of medical benefactors, may I be permitted to cite that great trinity of scientific giants who through their labors have accomplished so much in reducing disease and lessening human misery in all parts of the globe? They are Pasteur of France, Lister of England, and Koch of Germany; all of them aided their governments by direct participation in the governmental health departments. We are still mourning the death of the greatest of the three—Robert Koch. I do not believe that there is, even in the camp of our opponents in this so wrongly called "League for Medical Freedom," a

single intelligent individual who will deny the inestimable benefits which Koch has bestowed upon mankind through his discovery of the germs of tuberculosis, of cholera, of the spores of anthrax, of tuberculin, and through his many other equally important scientific labors. Yet, had it not been for the Imperial German Reichs-Gesundheitsamt, which is the equivalent of the institution we are striving for—a Federal Department of Health—Koch never would have been able to devote his life, energy, and great genius to those important discoveries through which thousands of lives have been saved in all civilized countries during the past few decades. It was while working in this governmental institution, which is doing exactly the work the Owen Bill asks the Federal Department to do, that Koch discovered the tubercle bacillus and the bacillus of cholera. Because of the discovery of the comma bacillus, we no longer have those fearful cholera epidemics which formerly decimated our own and other countries. This disease can now be easily diagnosed and by proper quarantine its mortality can be reduced to a minimum. And what shall we say of the progress that has been made in the fight against tuberculosis because the Federal Department of Health of Germany enabled Koch to do research work and thus discover the bacillus of

tuberculosis to be the primary and only direct cause of the disease? As director of the Hygienic Institute and member of the Reichs-Gesundheitsamt, he inaugurated that wonderfully effective campaign against tuberculosis whereby the mortality from this disease in Germany has been reduced to nearly one-half to what it was prior to the discovery of the tubercle bacillus.

Under Koch's inspiration and guidance and in the same institute many great scientific discoveries of incalculable value to humanity were made. Foremost among them are the works of Ehrlich, one of Koch's most celebrated pupils, who recently gave to the world a new remedy which promises to prove a specific in an affliction from which mankind has suffered for centuries.

As co-worker in the Kaiserliche Gesundheitsamt and the Institute for Infectious Diseases, affiliated therewith, we must also mention Behring, the discoverer of the anti-diphtheritic serum. Thanks to the discovery of this serum thousands of young lives are now saved which would formerly have fallen victims to the terrible disease known as malignant diphtheria. This was made possible by the opportunity given to the workers in the Reichs-Gesundheitsamt and Imperial Institute for Infectious Diseases.

Can there be any better argument in favor of the establishment of a Federal Department of Health?

ORIGINAL CONTRIBUTIONS

THE DIAGNOSIS AND TREATMENT OF EPILEPSY

H. A. Ingalls, M. D., Roswell, N. M.

For both diagnosis and treatment epilepsy must be divided into two main classes; simple and Jacksonian.

The history, if the patient is seen during a normal period, is usually quite clear. We are informed the aura is so positive that a nearby place can be selected in which to lie down for the true in all cases; the onset being so rapid that they cannot protect themselves from injury according to the statement of some.

The sensation, in the simple form, is described usually as a peculiar wave like motion beginning in the lower part of the body, which travels toward the head, and consciousness is lost about the time this sensation reaches the cervical region.

These patients cry or scream just as they are falling, but are rarely conscious of this fact after restoration.

The spasm is at first tonic in type and then passes to the clonic form.

The features are nearly always distorted; the head drawn to one side and the body rotated. The face is at first pale but soon becomes cyanotic.

The stronger muscles are brought into play and we find flexion of arms, wrist, fingers, thighs and legs. The heavy muscles of the back are at times markedly involved, producing opisthotonos.

In some cases the eyes are open and fixed, with dilated pupil; in others the lids are tightly closed by the spasm of the muscles so that examination of the eyes is a difficult matter.

The duration of the attack varies with individuals, but is fairly constant

in a given case. The tonic spasm lasts from a few seconds to a few minutes and is followed by the clonic form, after which the patient passes into a profound sleep and can rarely be aroused.

Before the stage of coma all the muscles of the body are involved; those of deglutition cause a marked flow of saliva which is made frothy by the motion of the tongue and admixture with air. This is often blood stained, due to biting the tongue during this stage.

If the patient has a hard fall, thorough examination should be made for possible injury and if found, the necessary treatment instituted.

In the average case there is an elevation of temperature, a point of considerable diagnostic importance.

Hysterical subjects, at times, closely simulate epilepsy, but the differential diagnosis is not hard if we bear in mind the fact that in hysteria the patient usually screams and talks during the attack, has no fever, and does not urinate or defecate during the paroxysm.

The Jacksonian type is characterized by manifestation in some peripheral portion of the body and is usually due to a definite local lesion, either central or peripheral.

In the beginning of this form of epilepsy the spasm is confined to a few muscles and the patient is not rendered unconscious.

Gradually the area of involvement is increased: more and more muscles are affected and the attacks become more frequent until finally the symp-

toms are almost identical with those of the true form and the patient falls unconscious in a typical fit.

A case under our care some years ago was so interesting it will be here reported to cover the diagnosis and treatment of the central form:

The patient, a young man of about twenty-five years of age, was struck on the head by a blunt instrument and a small scalp wound inflicted which crossed the line of the fissure of Rolando. As he was up and about his usual duties in a few hours the injury was given but little notice, the scalp wound being treated by his associates.

Some thirty days after the injury he had a spasm of his right thumb, which lasted but a few seconds. In ten days or two weeks he had another attack and called the attention of his friends to the peculiar condition, to his own and their amusement. The period between paroxysms became less and less and the spasm spread from thumb to hand and in a few weeks all the muscles of the right arm and hand would immediately follow the aura of the thumb.

When first seen by us the entire body was affected and the patient having from ten to fourteen seizures in each twenty-four hours. They were typical epileptiform attacks and close observation failed to reveal a spasm of the thumb prior to the other muscles. The patient insisted that he could always feel a peculiar sensation in the thumb before becoming unconscious.

An examination revealed a small scar of the scalp, but there was no depression of the cranial vault.

Operation being recommended and accepted an osteoplastic flap was turn-

ed down, using center of scar for center of the flap, and the meninges exposed. Nothing abnormal being detected, the membranes were reflected and the area on either side of the fissure of Rolando closely examined, but the cortex seemed perfectly healthy. The needle was used and the hand and arm centers located. An incision was then made into the cortical substance well outside these centers and a portion removed. The wound was closed in the usual manner and the patient made an uninterrupted recovery. There was no paralysis of the muscles of the right side and the epilepsy remained cured for at least fourteen months, when the patient was last seen. At that time he had had no symptoms at all of his trouble.

The pathology of the portion removed proved to be fibrous tissue formation. It was evident there had been minute lacerations produced at the time of injury and the irritation caused by the scar tissue resulted in epilepsy.

It is to be remembered this form may be due to peripheral as well as central irritation, as illustrated by a case in the practice of a friend in Texas: The patient, a negro boy of 6 or 7 years, was brought to the Doctor for treatment and his mother stated the trouble began some time previous in one of the fingers. Nothing abnormal was to be detected, so the case was regarded as a true epilepsy and the usual treatment given. The mother insisted on amputation, but was refused. The fits continuing she amputated the finger with an ax and a cure was thus secured.

For the true form some of the salts of bromine are indicated and should be crowded to the point of tolerance. Treatment should be continued for at least two years after all symptoms have disappeared and the drug should then be gradually withdrawn and the

patient closely observed, so dosage can be increased if signs of return are noticed.

Surgery is our only hope for the relief and cure of the Jacksonian type.

Operation should be early, as the results in the cases of long standing are not flattering.

Read before Chavez County Medical Society, July 11, 1910.

DIARRHOEA

By E. M. Fisher, M. D., Roswell

Diarrhoea is not a disease, but a symptom. Just as headache and dropsy are symptoms. It occurs, however, from the presence of any organic change in the intestinal walls, that is best considered as a malady, at least in several of its forms. Diarrhoea is the symptom or conditions above all others in some cases, but in others it is of little significance as compared to the organic lesions, which produce it. In this paper we will not take up, that form of diarrhoea that comes with Bright's disease, measles, and etc., but shall only speak of it as the trouble per se.

We usually see the serous or watery diarrhoea which arises from the ingestion of irritating food stuffs, which cause the intestinal mucosa to become hyperemic and to pour into the bowel poison and to wash out the intestines. Other cases follow the sudden exposure to cold and dampness, in which case the visceral congestion is severe, and we have a secondary catarrh of the intestinal mucosa producing the diarrhoea later. Third is the nervous diarrhoea, which comes from persons under severe nervous strain, such as actors, at their first appearance, etc. All of these forms of serious diarrhoea occur without much pain, except those due to irritating food stuff, this form is best treated by rest—completely cleansing the bowels with calomel and castor oil. Local applications to the bowel, and the administration of Dover's powder, bismuth subnitrate, salo,

etc. The nervous type usually responds to the Dover's powder or some similar preparation of nerve sedative.

Chronic diarrhoea is a chronic congestion of the mucosa of the sigmoid and rectum producing a constant flow of serum and is best treated by large doses of subnitrate of bismuth by the mouth and the old method of irrigation with a solution of nitrate of silver. 1-1000 to 1-15000 has given good results, also irrigation with saturated solution of sulphate of quinine. In later years the irrigation of the bowel with a solution of argyrol from one to ten per cent has proved very efficacious. The above treatment is the line I usually follow, but of course other physicians use many other drugs along the same line tanalbin, ichthalbin, salicylate of bismuth, canabis indica, bromides, belladonna and other so-called intestinal antiseptics. The most frequent form that we are called upon to treat is the diarrhoea of children or so called summer complaint, which usually takes a more or less epidemic form during the warm weather, and is, as a rule, manifested by a sudden onset of high fever, irritability of the stomach, frequent watery evacuations and symptoms of nerve involvement. This form usually follows an attack of acute indigestion. Two important features seem to influence the disease, that is temperature and diet, and for this reason the association of special dangers with the second summer of a child's life is due to

the fact that they are usually fed and, according to Holt, only three per cent of the children that die with this malady are nursing babies. According to statistics the bacillus dysenteriae is isolated in a great many of these cases, some claiming as high as 50 per cent.

Pathology—A catarrhal swelling of the mucosa of the large and small bowel is present. It is pink in color from capilaric congestion. Peyer patches are enlarged. The whole intestinal tube shows an early inflammation and in addition there is likely some involvement of the sympathetic nerves leading to the dilatation of the capillaries, and transudation of serum into the intestines, the alterations of the pulse temperature and respiration. The changes in the other organs are slight. Bronchopneumonia frequently occurs. The spleen is often swollen, the brain anemic, and the kidneys congested. **Symptoms**—There may be merely an increased number of stools with or without fever, restlessness especially at night, this continues for two or three days, when stools become more frequent, offensive, containing undigested food and curd. Frequently the disease has a sudden onset with vomiting, griping pains and fever, which quickly rises from 103 to 106; convulsions are sometime the initial symptom. The abdomen is sensitive and swollen, the stools are usually grayish or greenish, and contain undigested food or muck curds. In children of two years and older the trouble is quite often caused by eating unripe fruits or excessive drinking of milk, which usually shows in the stools. The relapses are frequent during hot weather, the stomach be-

comes irritable, there is no appetite, the tongue becomes dry and pasty, and the urine becomes dark and scanty. The course of this disease is variable, it may be acute in three to six days, terminating in either convalescence or death due to exhaustion, in other instances the acute symptoms subside particularly the fever while a moderate diarrhoea continues, is attended with marked wasting and debility.

Treatment—The treatment is hygienic, dietetic, and medicinal. Fresh air is important in all of the diarrhoea. The authorities tell us that if a case that does not yield to treatment in two or three days, when taken in the city, it should be removed to the seacoast or mountains; in this country I do not consider this necessary, only in cases of inanition. There should be frequent bathing, which is soothing, insures cleanliness and is very important as a antipyretic measure.

Dietetic Treatment—It is important to remember that digestion is arrested in the early stages, and food should be withheld from twelve to twenty hours, the thirst allayed by ice or albumen water.

Medicinal Treatment—The first thing is to thoroughly empty the alimentary tract. For this calomel and soda or castor oil are the preferable remedies, with irrigation of the colon to hasten the action of the drugs. Opium should be used very sparingly, if at all, following this with small doses of bismuth subnitrate or subgallate, salol, tanablin, or ichthalbin usually relieve the congestion. The irrigation of the bowel is very essential, for this a normal salt solution or a weak solution of argyrol is preferable.

Read before Chaves County Medical Society, August 11, 1910.

NOSE AND THROAT DISEASE A CONTRIBUTORY CAUSE OF PULMONARY TUBERCULOSIS

By Dr. Louis J. Lautenbach, A. M., M. D., Ph. D., of Philadelphia Pa

It is the intent of this paper not so much to call attention to the affected nose and throat tissues so often accompanying pulmonary tuberculosis, but rather, while admitting their concurrence, to study the causative tendency of such troubles, in the hope that with the consideration of these conditions preventive measures will necessarily suggest themselves. In other words, the deduction will be a plea for the correction of all abnormal nose and throat conditions, especially in cases where there is an inherited or acquired tubercular tendency.

Whether pulmonary tuberculosis be considered as a local expression of a systematic disease or whether it is considered as a local infection with secondary general symptoms, we are in this paper concerned with the lung affection, the causes of its involvement interesting us equally in either case. The point to be made is whether the imperfectly performed functions of the nose and throat ever produce tubercular lung involvement; whether such causation is frequent or rare and whether by the recognition and removal of these head troubles, this lung involvement can be avoided or if already in progress, controlled or overcome.

The subject of tuberculosis is at present an all absorbing one to the community. Its seriousness is such that any measures tending to its modification are not only of high humanitarian but of great economic value as well, while the alarm which this disease now creates, with the exaggerated idea of its contagiousness is to be deprecated as unreasonable, yet it has fostered an investigating spirit of which the physician can take advantage in incul-

cating hygienic and therapeutic truths. As a matter of fact the mass of material on this subject is current literature equals, if it does not exceed, that appearing in the medical press. It is my desire to present the subject in such a manner that the thoughts suggested can be applied to the improvement of actual cases and in the prevention of formative and incipient ones.

Amid differences of opinion on other points, all are agreed on this point, that whether as preventive or cure, an ample supply of fresh air is the chief requisite in lung tuberculosis; with fresh air, readily expandible chest walls and good circulation of the blood, and there will be no deterioration of lung structure. If any or all these conditions are interfered with, disease sooner or later will appear, though the lungs being one of the softer or parenchymatous tissues are long suffering and are readily self-healing if the abnormal conditions do not exist too long. Such diseases followed by self-healing can be demonstrated in any dissecting room, where almost 50 per cent of the subjects show such healing.

This indicates that at least half the human race have such disease at some period of their lives, of whom the greater part have not suspected the trouble during life: the lungs after death showing the cicatrices and solidifications.

Now as all the air entering the chest should pass through the nose over healthy mucous surfaces, to get a sufficient supply of air it is necessary to have the nostrils nearly normal: nostrils which will not only not obstruct the entrance of air but allow

the entrance of sufficient air without mouth breathing, and also healthy so as to thoroughly moisten it and filter all foreign matter, both organic and inorganic.

I, of course, include the naso-pharynx as part of the nostril. In addition there can be no obstructive or any extensive follicular disease of the pharynx, or paralysis of the pharyngeal arches, soft palate, or glottis, present without interfering with the quantity and quality of the air entering the chest.

If the mucous surfaces over which the air passes are dry from local disease or general conditions, the cleansing and humidification of the air will not be perfectly performed, and foreign particles, which otherwise would be arrested, will be deposited in the lung bronchioles. The same condition is not infrequent after extensive nose operations such as the sawing or drilling away of the middle turbinate bones, when the moistened mucous surfaces, being no longer approximate enough, the air passes too rapidly through the nose. If these unarrested particles are inorganic, while no infection is the immediate result, they are deposited on the bronchial surfaces, thus interfering with the passage of the air beyond and preventing proper aeration of the blood and by causing irritation of the membranes, inviting inflammation and disorganization and thus forming a convenient abulum for the growth of organic matter. If this organic matter should be the tubercle bacillus, a small tuberculous nidus is produced; if of another nature, while they may produce inflammation they are usually destroyed by the irritating discharges and the consequent fermentation and digestion, and the results are removed by a cough of the irritant type.

The inorganic matter, unless deposited too continuously or in too great a quantity when usually involution occurs, a typical instance of which is snee in coal workers' lungs, is almost always removed by an irritating spasmodic contraction of the bronchial walls evenuating in cough; thus self cure is affected.

Another condition favorable to lung involvement occurs in the overgrowths often present in the nose, naso-pharynx or pharynx, which becomes centres of inflammation and of the production of disease, often semi-suppurative discharges; conditions inviting the local development of tubercular disease. On provocation there is direct extension of the inflammation to the chest by the multitude of bacilli swept onward by the currents of air in the act of inspiration. This is especially true when violent sneezing, a frequent result of such diseased nasal conditions, occurs. In sneezing the great quantity of air forced out is at once succeeded by a still stronger inspiration, very likely to tear from the entrance cavity any particles sufficiently loose to be carried by the current into the lung tubules.

Operations for post-nasal adenoids, when ragged or suppurating edges are inadequately treated, operations for nasal polypi if the pedicles remain torn or bleeding without being cicatrized, bone operations receiving little or no after treatment, are not infrequently starting points of these conditions. You may recall patients who have claimed that their bad health dated from such an operation.

A thought we should keep ever before us for our own and the patient's encouragement, and as a reason for cheerfulness and care, is that a variety of conditions must be present in order to produce a case of pulmonary tuberculosis and that these conditions are

largely remediable. We should remember that the tubercle bacilli are but a small part of the agency in the production of the disease; that these bacilli are constantly found about us and within us without producing disease, and that the physical condition must be materially enervated, probably for a long time before such bacilli can become active.

It is a question whether the dreaded disease can be produced in any case where there is no lesion of the linings of the bronchi, either from a limited local inflammation or a larger involvement as in bronchitis, pneumonia, pleurisy, etc. You will notice that I have expressed my belief that pulmonary tuberculosis is the result of a local infection in a physical being markedly below normal in his powers of resistance. Despite recent arguments opposed to this I have not as yet found any reason for changing my belief.

The tubercle bacilli, even when most numerous and active, cannot cause disorganization of normal mucous tissues, its own healthy mucous discharge with the help of unimpeded blood supply and properly performed lymphatic functions, sufficing for its own protection. Even when through failure of some health conditions the resisting power is lowered and the bacillus finds lodgment and multiplication occurs, nature is most ready to limit the infected area and needs only intelligent cooperation to arrest the disease.

I here lay stress on but one of the many methods of such cooperation, namely, scrutiny and necessary treatment of the nose and throat as the outposts whose integrity insures the proper supply of our most valuable remedy and, if diseased, infects the very remedy we wish to apply. My own conclusion is that contracted or diseased nasal passages, a tendency to inflamed

membranes and recurring colds, especially if accompanied by fatigue and depression, is plain indication that it is time for the ounce of prevention, and by experience, have found care rewarded by averted disease and returned health in the many cases I have seen. I will enumerate the following few cases as examples of hundreds of similar experiences:

Case 1.—Mr. S. K., age 35 years, seen first in 1897. He was tall, broad shouldered, flat chested, of underweight for his build and of distinctly nervous temperament. His vocation—he is a clergyman, and a powerfully emotional preacher—compelled him to use his throat and lungs a great deal, and he complained that in speaking his voice became rough and harsh and it was only with great effort he could continue his addresses. He was annoyed by a hacking throat cough and on provocation a chest cough, accompanied by a little fever. He was increasingly subject to colds of head and chest and during the four or five previous years had slight attacks of bronchitis once or twice yearly.

His right apex was somewhat dull, neither lung fully expanding; the larynx was too red and with an increase of secretion. The nose and throat were congested throughout, the glandular and follicular structures all showing a tendency to enlargement and engorgement. The nasal cavities were much contracted by some cartilagenous and much fibromucous swelling and a general nasal congestion with increased secretions; the vault of the pharynx was blocked by a lymphoid swelling and consequent adherent and flowing discharges.

The improvement in this case was very gradual. The treatment consisted of thorough cleansing, the removal of all overgrowths and the restoration of

the glandular functions; this restoration of the glandular functions was aided by hygienic and therapeutic measures that also toned up his system and corrected the nervous and circulatory disturbances.

I have seen this case at intervals ever since 1897. At times months pass without the former drawback of head and chest colds. His nasal capacity is so much greater that he breathes freely and entirely through the nose. His chest measurement has increased three inches. He works harder than ever. The hoarseness rarely appears, although he speaks more frequently to larger audiences and in larger buildings.

This is a case where tuberculosis was in a fair way to develop. It was arrested very largely by the hygienic aid afforded by the restoration of natural breathing, increasing the vigor of the body as much by the increased and purified air supply as by medicine. These latter consisted of Tincture of the Chloride of Iron, Compound Syr. of the Hypophosphates, Compound Tincture of Cinchona, Strychnine and Cod Liver Oil, as occasion indicated.

Case No. 2.—M^r E. G., age 26, seen first in 1903. He had a history of tonsillar disease in early childhood and this was followed by catarrhal affections of the nose and throat and later on of chest. About a year before I saw him his throat began to trouble him; the sides in the region of arches were sore and swollen, and he experienced difficulty in breathing through the nose. He lost weight and color—had no appetite—was tired and ambitionless. Three months previously the tonsillar inflammations which had subsided, renewed themselves and his condition became serious. When I saw him first he was pale and thin, had lost 13

pounds during the year, pulse rapid, skin warm but colorless. He had persistent cough with some expectoration showing tubercle bacilli in small amounts. Chest sounds were muffled, both apices were moist and dull. He had been raising small quantities of blood for over two months. He was very alert mentally but extremely irritable. The fibrous and mucous tissues of the nose were much swollen and there was an enlargement of the lymphoid tissues in the post nasal space. Both tonsils were red and enlarged with numerous crypts and ragged openings from former ulcerations; the uvula was elongated and both soft palate and arches hung very low in the throat causing irritation by being in constant contact with the tongue.

After treatment lasting about twelve months, he had gained much in weight and his color, appetite and strength were restored. His cough was gone and the sounds of the chest were normal, except there remained some dullness over the right apex; his pulse was slightly above normal and the nervousness and irritability were greatly lessened.

In this case there was prompt removal of the adenoid growth and of the diseased tonsils; the throat and nose were regularly and thoroughly cleansed and the middle turbinate regions cicatrized. The only internal remedies I used (he was treated mechanically through the entire period by his family physician) was one-half ounce of Cod Liver Oil daily with Iodine gr. one-sixth, and Phosphorous gr. one-one-hundredth and an increasing dose of Strychnia. I requested him to wear light weight wool underclothes and to take luke warm baths only on retiring. As he grew stronger he used cold sponge baths daily in the mornings. All this time he was urged to spend

much time in the open air without much regard to weather, which he did.

Case 3.—Mr. E. W., age 41. Seen first in 1903. A clergyman, large, well built, ruddy complexion, apparently healthy. He had been having numerous troublesome hemorrhages apparently from the chest. These hemorrhages occurred usually without warning and occasioned deep apprehension as once or twice they occurred while addressing an audience. The several physicians consulted agreed in pronouncing the chest trouble most serious. The patient was depressed, he had been losing weight and strength rapidly, and was confronted by the alternative of continuing in his exacting calling against professional advice or adapting himself to curtailed activity in the hope of restoring himself to a normal condition.

I found an extensive area, deep down toward the centre of the right lung, where evidently for sometime past there had been an interference of function. An area of dullness and non-expansibility and lack of air capacity by virtue of an occluded condition of the bronchi. I judged this area to be about 2 1-2 by 2 inches and about of an equal depth. There was lack of full expansion at the right apex but apparently no occlusion. The lungs otherwise seemed normal, no swellings of the arytenoids. Tonsils enlarged and red; a small ulceration on upper surface of epiglottis to the right. The nose was congested, swollen throughout, more so on the right where there were several spots of ulceration, especially at the posterior surface of the middle turbinate where quite a hemorrhage had just occurred, the blood, preceding my first examination, was still trickling down the right side of the pharynx.

The local treatment consisted in the restoration of the tissues by thorough

cleansing, stimulation and cauterization and the control of the bleeding by Monsel's Solution temporarily.

The internal treatment, in addition to that given by his physician, was Cod Liver Oil with Iodine and Phosphorus, also a solution of the Malate of Iron with Comp. Syrup of the Hypophosphites, and to control the bleeding the use of Liquor Ergotae Normalis, which in spite of a general impression to the contrary is not limited in its good effect to the uterus, but exerts a marked effect on the circulation of all erectile as well as mucous tissues.

After a few months of this regime, continuing at his work as usual, the hemorrhage disappeared, his strength returned, weight was added, and he has met with great success in a constantly increasing round of duties.

Case 4.—I saw Mr. G. F., age 30 years, in 1898. He had had a series of chest hemorrhages which had greatly alarmed his family and physician. The last hemorrhage had been a very sudden and sharp spurting of bright red blood reported to be about half a pint. This was followed by great exhaustion. He had a rapid pulse and respiration, sudden perspiration on slight mental or physical exertion, night sweats had appeared a month or more before. He had drooping lids, restless eyes, hair bleached at roots and a general air of fatigue.

In this case the entire left apex was filled up and just below it was a wet cavity, perhaps the size of a hen's egg, through which the air passed with a shrill sound and heard occasionally when he talked or sneezed, when sitting at the ordinary conversational distance from him.

Examination disclosed extensive tonsillar disease of long standing, the result of ulcerative proliferation. The arches were heavy with profuse dis-

charges. The upper regions of nose were occluded by swellings of both middle turbinates and by adherent inspissated secretions. On the upper aspect of the left middle turbinate there was a proliferative disease in progress and some ulceration of a slow type without any apparent bleeding. The general treatment was continued by the family physician; local treatment at first cleansing then depletive was at once commenced. The electric cautery was freely used on the left middle turbinate and on both tonsils and internal medicine given for restoring the func-

tions of glandular and mucous tissues. I also exacted for some weeks the daily drive of three miles from his country place to the railroad station, the sixteen mile journey to town and the half-mile walk to my office and return the same day, rain or shine.

The case improved from the commencement, he gained over 50 pounds while under treatment and although a year had been the limit of life allowed him in all probability, he is still living; has had no return of the disease and is apparently well.

BOOKS REVIEWED

GYNECOLOGICAL DIAGNOSIS

By Walter L. Burrage, A. M., M. D. (Hart)—D. , Appleton & Company
New York and London, 1910. With 207 Text Illustrations.

This book is designed to assist the general practitioner in making a diagnosis in the cases of uterine disease that form so large a part of the practice of a majority of physicians. The steps of the history taking and the examination are described in detail, and at the same time with conciseness. The procedures and the unusual instruments that might be used by some specialists under certain circumstances being omitted, and only those that have been found useful in the extended experience of the author being described and figured, and only those that are absolutely necessary for the making of a complete diagnosis.

Simplicity of technic is aimed at and all unnecessary frills, so dear to many specialists, are omitted. Instruments are recommended that can be bought at any instrument shop; but that there may be no mistake as to

the exact form and variety intended, each instrument is both figured and described.

Photographs of the positions used in the examination, taken from actual patients ready for examination, are reproduced in the cuts which accompany the text descriptive of these procedures. The symptoms of uterine disease receive exhaustive treatment in Chapter X (pages 127 to 161) and the probable diagnosis is sketched from the symptoms.

The entire book is written from a clinical point of view and the reader is not burdened with the technic of the bacteriological laboratory. However, enough of the anatomy and development—of the salient points to make the subject clear—is placed at the beginning of each chapter, and the latest views of the pathology have been summarized for the reader's benefit.

The illustrations—over two hundred—have been prepared with great care to make plainer the text. To this end they are placed as near as possible to the printed matter which they explain. Not only that, but in case, as often happens, a figure illustrates several points, a definite page reference to the missing situation is given every time so that the reader has no difficulty in finding it. The picture that best illustrates the point has been chosen, and the fetish of "original illustrations," which often show little beyond unusual cases in the author's experience, has not been worshiped in this book.

An original feature is an alphabetical index of illustrations in the front of the book. Thus, the reader can find any desired figure without ploughing laboriously through the entire list. All the illustrations are included also in the very full index at the back.

Every chapter is headed by a summary of the contents of that chapter, with page references, and throughout the work any reference to the subject under discussion, which is treated elsewhere in the book, is accompanied by a page reference to the other place.

DIGALEN. Medical Opinions of Digalen.—The Hoffmann-La Roche Chemical Works, 65 Fulton Street, New York.

This monograph contains very valuable information concerning Digt toxin Soluble Cloetta, which is manufactured by the publishers under the trade name "Digalen." A postal will bring copy of the monograph.

DISLOCATIONS AND JOINT-FRACTURES.—By Frederic Jay Cotton, A. M., M. D., First Assistant Surgeon, Boston City Hospital. Octavo of 654 pages, 1201 original illustrations. Philadelphia and London: W. B.

Saunders Company, 1910. Cloth, \$6.00 net; Half Morocco, \$7.50 net.

When reading the title page of the book and noticing that there are 1201 illustrations, of which 830 are by the author, one's curiosity becomes aroused and not disappointed, because we meet something entirely new. It follows that the text is limited and not tedious as the number of pages (654) may lead us to expect in a work dedicated solely to injuries to the joint.

To publish a book on injuries of the joint is a new feature, but a good one. The work was needed because save for Gurlt, Hamilton and Stimson this dark field has been neglected of late and a summary of our previous knowledge, modified by late experience and new methods, a timely undertaking, carried out successfully by the author.

The plan of the book is well laid. The illustrations are classified, where necessary, in the general index. The illustrations themselves are placed where they belong in the text as integral part of same. Most textbooks sin in this regard and much of the value is lost by the illustration not being before the eye when the text is read they are to illustrate.

Another feature, the author calls it, "a reaction from the German scholasticism," is the omission of reference and literature-notes. This is well. It shows individualism and its thread goes through the whole work and the author gives us his treatise, his review of the whole matter text and illustrations are his own.

Formerly injuries to the joints were largely guess-work, the author shows the student how to recognize facts.

We are glad to notice that the "Wrestler's Grip" is condemned for reduction of the shoulder, while easy and quick when well applied it is a dangerous jiu-jitsu trick and its con-

demnation deserves to be universal. The same holds good in regard to the posterior luxations of the elbow using the knee as fulcrum. Each reduction must be based upon a safe principle, physics applied to anatomy, and the author took great pain to make this clear to the student by word and picture.

The book is valuable.

A MANUAL OF PERSONAL HYGIENE: Proper Living upon a Physiologic Basis. By Eminent Specialists. Edited by Walter L. Pyle, M. D., Assistant Surgeon to the Wills Eye Hospital, Philadelphia. Fourth Revised Edition. 12mo. of 472 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$1.50 net.

This lesser work is for the layman and its object is to set forth plainly the best means of developing and maintaining physical and mental vigor. Throughout the book there is concise but adequate discussion of the anatomy and physiology of the parts under consideration, upon which is based the subjoined advice. In other words, there is an exposition of proper living upon a physiologic basis. Purely technical phraseology has been avoided, as far as compatible with the scientific value of the text, and numerous explanatory diagrams and illustrations have been introduced. Although each special chapter is complete in itself, there has been purposive repetition of remarks upon subjects of such general interest as eating, drinking, breathing, bathing, sleep exercise, etc., in order that they may be discussed more thoroughly from several standpoints.

There is also an illustration of Home-gymnastics, a chapter on Domestic Hygiene, an Appendix containing the simpler methods of Hydrotherapy, Thermo-therapy, and Mechano-therapy, and a section on First Aid in

Medical and Surgical Accidents and Emergencies. A concise Glossary of the purely medical words unavoidably used in the text has been especially prepared for the convenience of non-medical readers.

DYSPEPSIA: ITS VARIETIES AND TREATMENT. By W. Soltau Fenwick, M. D., (London), Doctor of Medicine of the University of Strassburg. Octavo of 485 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, \$3.00 net.

This book is the outcome of sixteen years of study along one original scheme. The author gives us the benefit of the clinical experience gained by the personal examination and treatment of more than eighteen thousand persons afflicted with digestive disorders.

The subject seems trite, yet the practitioner knows that here too we need "more light." The author considers the word *dyspepsia* not in its etymological sense, but refers to the process of solution and absorption of food in the whole digestive tractus. His classification of gastric indigestion is: (1) Disorders of Secretion; (2) Disorders of Motility; (3) Disorders of Nervous Mechanism; (4) Gastritis; (5) Due to Displacement; (6) Foreign Bodies and Parasites; (7) Due to Infancy or Old Age; (8) Secondary to Diseases of Other Organs.

This classification is new but nevertheless logical and perhaps will become classical or standard. In this manner the whole field of indigestion,—so far apart by variation,—appears before the student's eye and memory united by its etiologic factors.

Each class or variety is given in a very concise, but complete manner: General remarks, etiology, symptoms, physical signs, diagnostic methods, prognosis and treatment.

Whenever diagnostic methods are given the most practical have been selected and the reader is not burdened by bulky material which belongs to the pathologist and the laboratory proper and could not be carried out by each practitioner. The treatment is practical and we are glad to see that drugs hold the background and physiologic measures lead. The reader can easily recognize the fact that the author resides in England because whenever diet is considered the insular way of living is in his mind. The author does not hesitate to recommend some of the many dietetic preparations of American and European manufacturers and there is

certainly no reason for using such.

Preparations which neither housewife, nurse nor pharmacist can put up at short notice in a palatable and uniform form as furnished by the manufacturing chemist here and abroad. We, in America, are becoming a little too overorthodox in these matters and the decrees of the laboratory of the A. M. A. cannot be considered final.

The author recognizes fully the value of electricity. The bacillus bulgaricus is mentioned frequently and its products recommended.

The book is a very valuable addition to the practitioners library, it deserves a place amongst the standard text books.

NEWS ITEMS

ROSWELL

Our new Sanitary Ordinance, together with the new Sewer and Water Systems, is producing results. So far there have been only two cases of typhoid fever reported to the City Physician, whereas heretofore, by this time in the season there have usually been from twenty to thirty.

Several of our physicians are preparing to attend the meeting of the Territorial Society in Albuquerque, the latter part of this month.

The crusade that has and is being waged on "the typhoid fly" makes Roswell a better and more pleasant place in which to live.

W. T. Joyner has returned from his trip East and reports having had a pleasant and profitable trip.

The little child of C. F. Beeson has been quite sick, but is now on the mend.

For the past several months the Chaves County Medical Society has been studying the "Post Graduate Course," as promulgated by the A. M. A., and the most of us feel that in this work we have done more and better work than in pursuing the old way of allowing any one to read papers on any subject he might choose. The old way scattered the work too much, while the course adopted, crystalizes the thought at each meeting along one particular line or family of diseases or subjects. We are now waiting for the A. M. A. to promulgate the next year's program, having finished the last year work.

Dr. T. F. Fonkannon, of Emporia, Kan., and Dr. C. L. Patton, of Olpe, Kan., were visitors at the last meeting of the C. C. M. S.

The little child of L. H. Pate, of Lake Arthur, a member of the C. C.

M. S., died a few days since. Fate seems to deal harshly with Dr. Pate, he having only recently lost his wife.

J. W. Kinsinger, with his family, left a few days since for some point in Missouri, where the family will remain for a couple of years, while his son and daughters will be in school. Dr. Kinsinger will return in a few weeks to push his real estate business for which he abandoned the practice of medicine one year ago.

The following resolution was adopted by the Chaves County Medical Society at the meeting of July 14th:

Whereas: Death has removed from our association one of our fellow-workers, Dr. E. C. Thorn, who died at his home in Hagerman, New Mexico, on July 11th, 1910; and,

Whereas: In his death the Chaves County Medical Society has lost an useful and intelligent member, his community an honorable citizen and reputable physician, and his family a loving husband and father, therefore,

Resolved: That the Chaves County Medical Society deeply feels the loss, and extends its heartfelt sympathy to the bereaved wife and "little ones";

And that a copy of the resolutions be spread upon our minutes and also

a copy sent to the family of the deceased member.

CHAS. F. BEESON,

W. C. BUCHLY,

J. W. TINDER,

Committee.

LAS VEGAS

W. Kaser and wife have gone for one month vacation to Illinois, Wisconsin and Michigan.

C. H. Bradley and family returned from an extensive trip to the centers of the Atlantic coast.

C. S. Losey went to the Grand Lodge, B. P. O. E. in Detroit.

F. T. B. Fest spent two weeks in Milwaukee.

Jno. Hess has joined the Las Vegas Medical Society.

The American Association of Clinical Research will hold its second annual meeting in Boston, September 28-29, 1910. All physicians are most cordially invited to become members. Dr. James Krauss, the Secretary, of 419 Boylston Street, Boston, will forward application blanks and programs upon request.

ABSTRACTS

STREPTOCOCCUS OF SCARLATINA AND THE REACTION OF FIXATION.—Ch. Foix and Et Mallein (*Presse med.*, March 26, 1910), after examination of the streptococcus of scarlatina in twelve cases, obtained 83 per cent of positive tests of the ag-

glutination reaction. This has been confirmed by the experiments of Schliessner, who in the same way obtained 81 per cent of positive reactions. He concludes that the serum of the scarlatinous contains anti-bodies which act against streptococci, which can be

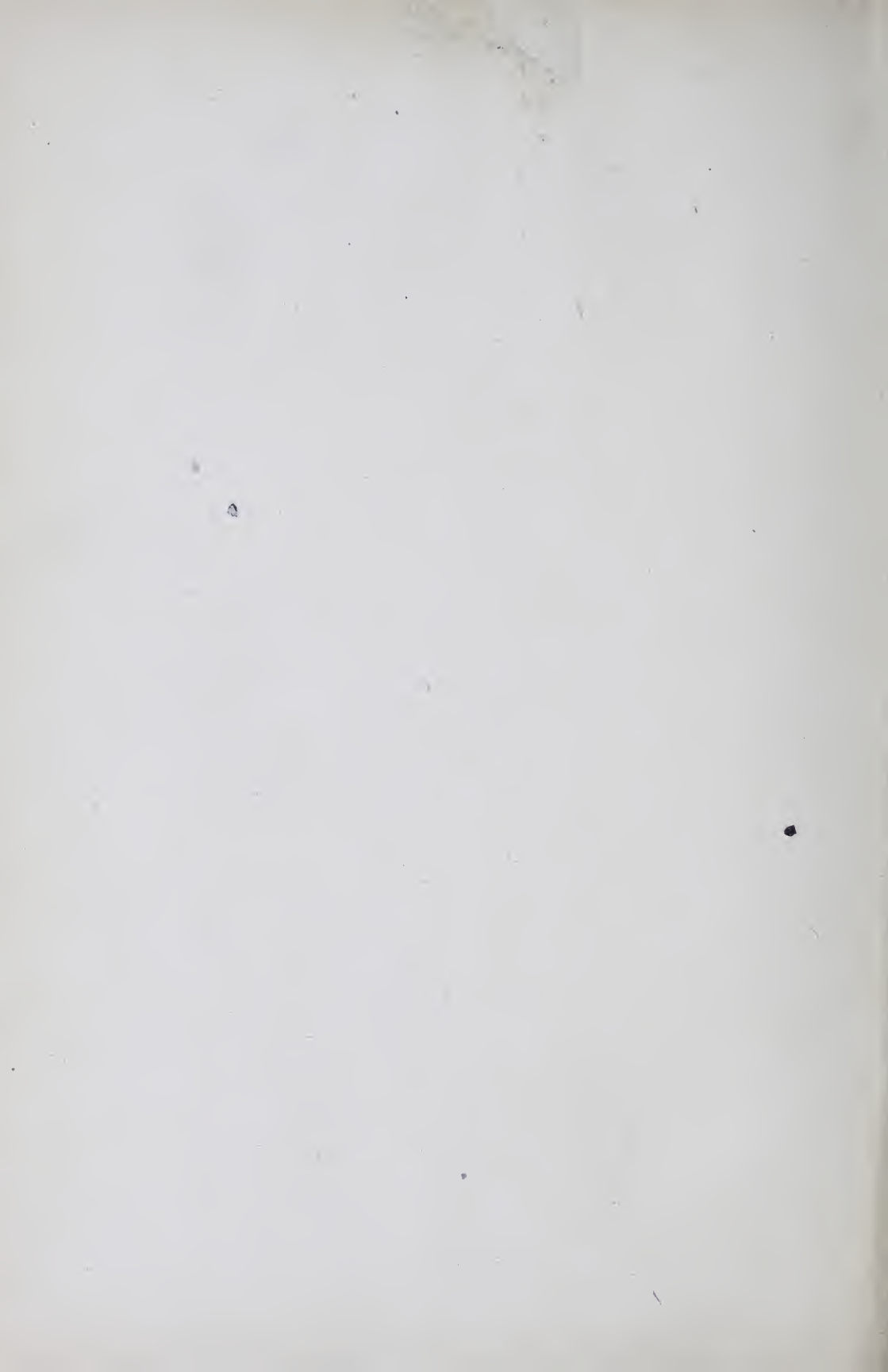
easily isolated both from the throat and the blood in the course of the disease. These anti-bodies may be placed in evidence by the reaction of fixation in the great majority of cases. The reaction of fixation evident in scarlatina is absolutely negative to other streptococcemias, especially erysipelas. Thus the individuality claimed by Berge, Moser, and the Gabritchewski for the streptococcus of scarlatina is confirmed by the authors.

EPILEPSY IN CHILDREN AND ITS TREATMENT WITH BROMIDE.— Paul Boncour (*Prog. med.*, March 19, 1910) thinks that, although the bromide treatment is the best for epilepsy, its success depends greatly on the method of administration and the attention given to the details of diet and hygiene. It is indicated in all cases in which convulsions are present and should stop all motor phenomena, but in cases of petit mal, without any convulsive movements and of mere dizziness, it is less successful.

The cause of the attacks should be carefully sought out and as far as possible removed. A daily history card kept by the parents is a great aid to the physicians in the knowledge of the number and type of convulsions, and thus of the effect of bromides. The bromide must be given in sufficient quantity and for a sufficiently long time, generally for several years. The author prefers a mixture of the three bromides, sodium, potassium, and ammonium, to which he adds in some cases calcium bromide. The dose must be carried up to a point at which the motor manifestations are controlled without marked bromism, and must then be kept at that point for months or years. Irregularity and lowering of the dose without permission is responsible for most of the failures. A great aid to the effect of the treatment is given by restricting the amount of chloride of sodium that is used with the food to a small quantity. The bromide is then effective in smaller doses. It should be continued three years after the last attack.









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